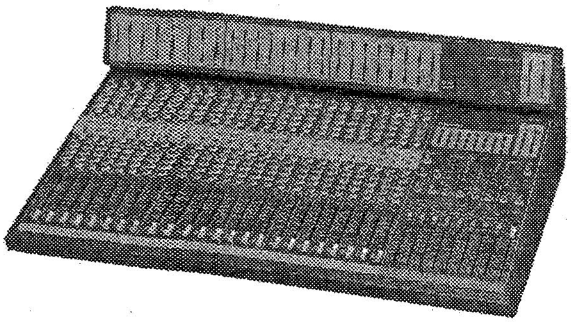


TASCAM

TEAC Professional Division

SERVICE MANUAL

M-1600

Recording Console

INSTRUCTIONS FOR SERVICE PERSONNEL

BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE - CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

Effective : July, 1996

D00275100A

1. SPECIFICATIONS
仕様

MIC IN (XLR-type Connector, Balanced)

Input Impedance : 2.2k Ω
Nominal Input Level : − 55dBm (1.4mV)
Input Level : − 57 dBm (1.1mV, Trim max.) to
− 2dBm (0.6V, Trim min.)
Trim Range : 55 dB

LINE IN (1/4″ TRS phone jack, Balanced/Unbalanced)

Input Impedance : 10k Ω
Input Level :
CH1 to CH8 : − 32 dBm (19.5 mV, Trim max.)
to + 18 dBm (6.2 V, Trim min.)
CH9 to CH14 : − 20 dBm (77.5 mV, Trim max.)
to + 14 dBm (3.9 V, Trim min.)
Trim Range : CH1 to CH8 : 50 dB
CH9 to CH14 : 34 dB

TAPE RETURNS (D-sub 25 pin connector, Balanced/Unbalanced)

Input Impedance : 10k Ω
Nominal Input Level : + 4 dBm (1.2V)
/− 10 dBV (0.3 V)
Maximum Input Level : + 28 dBm (19.5 V)
/+ 14 dBV (5.0 V)

INSERT (1/4″ TRS phone jack, Unbalanced)

− Send (Tip) −
Output Impedance : 75 ohms
Nominal Output Level : − 2 dBu (0.6 V)
Maximum Output Level : + 22 dBu (9.7 V)
− Receive (Ring) −
Input Impedance : 5 kohms
Nominal Input Level : − 2 dBu (0.6 V)
Maximum Input Level : + 22 dBu (9.7 V)

Equalizer

Type : 3-band, 1-sweepable
Frequency :
HI : 12kHz, shelving type
MID : 100Hz to 10 kHz, parametric type
LO : 80 Hz, shelving type
Boost/Cut : ± 16 dB (approx.)

SIGNAL/OL (Overload) indicator

SIGNAL (Green) lit : − 10 dB (approx.) below nominal level (− 2 dBu)
OL (Red) lit : − 3 dB (approx.) below clipping level (+ 22 dBu)

EFFECT RETURNS (1/4″ phone jack, Unbalanced)

Input Impedance : 10 kohms
Nominal Input Level : − 10 dBV (0.3 V)
Minimum Input Level : − 20 dBV (0.1 V)

2TR INPUT (1/4″ TRS phone jack, Balanced/Unbalanced)

Input Impedance : 15 kohms
Nominal Input Level : + 4 dBm (1.2 V)/− 10 dBV (0.3 V)
Maximum Input Level : + 28 dBm (19.5 V)
/+ 14 dBV (5.0 V)

AUX SUB INPUTS (1/4″ phone jack, Unbalanced)

Input Impedance : 24 kohms
Nominal Input Level : − 2 dBu (0.6 V)
Maximum Input Level : + 22 dBu (9.7 V)

STEREO SUB INPUT (1/4″ TRS phone jack, Balanced)

Input Impedance : 15 kohms
Nominal Input Level : + 4 dBm (1.2 V)
Maximum Input Level : + 28 dBm (19.5 V)

GROUP OUTPUTS (DIRECT OUTPUTS) (D-sub 25 pin connector, Balanced/Unbalanced)

Output Impedance : 75 ohms
Nominal Output Level : + 4 dBm (1.2 V)/− 10 dBV (0.3 V)
Maximum Output Level : + 28 dBm (19.5 V)
/+ 14 dBV (5.0 V)

STEREO OUTPUT (1/4″ TRS phone jack, Balanced/Unbalanced)

Output Impedance : 75 ohms
Nominal Output Level : + 4 dBm (1.2 V)/− 10 dBV (0.3 V)
Maximum Output Level : + 28 dBm (19.5 V)
/+ 14 dBV (5.0 V)

AUX SENDS (1/4″ phone jack, Unbalanced)

Output Impedance : 100 ohms
Nominal Output Level : − 2 dBu (0.6 V)
Maximum Output Level : + 22 dBu (9.7 V)

MONITOR OUTPUT (1/4″ TRS phone jack, Balanced)

Output Impedance : 75 ohms
Nominal Output Level : + 4 dBm (1.2 V)
Maximum Output Level : + 28 dBm (19.5 V)

PHONES (1/4″ stereo phone jack)

Maximum Output Level (L+R) : 100mW + 100mW
(34 ohms)

Meter

Monitor L, R : 12 dot LED meter plus OL indicator
Group 1 to 8 : 7 dot LED meter

Power Requirement

USA/CANADA : 120V AC, 60Hz
U.K./EUROPE : 230V AC, 50Hz
JAPAN : 100V AC, 50-60Hz

Power Consumption

M-1600/24:
- **USA/CANADA** : 60 Watts
- **U.K./EUROPE** : 85 Watts
- **JAPAN** : 60 Watts

M-1600/16:
- **USA/CANADA** : 45 Watts
- **U.K./EUROPE** : 60 Watts
- **JAPAN** : 45 Watts

Signal to Noise Ratio: (B.P.F.:DIN AUDIO, EQ:flat)

GROUP OUTPUTS S/N (Balanced)
(LINE IN, Input fader at the unity gain)
[24 input/16 input]

All channel assign OFF, Group fader at the unity gain : 93 dB/93 dB
All channel assign ON, Group fader at the unity gain : 76 dB/77 dB
1 channel assign ON, Group fader at the unity gain : 87 dB/87 dB (Input 1 to 8 CH)
89 dB/89 dB (Input 9 to 24 CH)

STEREO OUTPUT S/N (Balanced)
(TAPE RETURNS (TAPE sw. ON),
Input fader at the unity gain)
[24 input/16 input]

Master fader down : 96 dB/96 dB
All channel assign OFF, Monitor OFF, Master fader at the unity gain : 94 dB/94 dB
All channel assign ON, Monitor OFF, Master fader at the unity gain : 80 dB/82 dB
1 channel assign ON, Master fader at the unity gain : 87 dB/87 dB

Other S/N

AUX SUB INPUT to AUX SEND : 76 dB
PHONES : 70 dB
MONITOR OUTPUT (2TR INPUT) : 87 dB

Mic noise (RMS, BPF:DIN AUDIO, Max. gain, 150 ohms terminated)

Equivalent Input Noise : −127 dB

CMRR

MIC Input (1 kHz at Maximum level) : 75 dB

Total Harmonic Distortion (THD)

1 MIC IN to GROUP OUTPUT (Input +40 dB up, 1 kHz) : Less than 0.013%
1 LINE IN to any unbalanced output (1 kHz) : Less than 0.008%
1 LINE IN to balanced output (Group, Stereo) : Less than 0.006%
2TR INPUT to MONITOR OUTPUT : Less than 0.006%

Frequency Response (at nominal in/out level, EQ flat)

MIC/LINE IN to GROUP OUTPUT : 20 Hz to 25 kHz, +0.5/−1.5 dB
HEADPHONE : 50 Hz to 20 kHz (100 mW), +0.5/−2.0 dB
Other output : 20 Hz to 25 kHz, +0.5/−2.0 dB

Crosstalk

Input/Group Fader Attenuation : 95 dB (at 1kHz)
Mster Fader Attenuation : 95 dB (at 1 kHz)
Adjacent Channel Direct Out Crosstalk : 90 dB
Group/Stereo Crosstalk (Monitor OFF) : 60 dB (at 10 kHz)
Aux 1-2 Crosstalk : 58 dB (at 1 kHz)
Other outputs : 70 dB (at 1kHz)

Click Noise (Without power on/off, phantom)

Less than −35 dB

Dimensions (W × H × D) :

M-1600/24 : 947 mm × 182 mm × 580 mm (37.3″ × 7.2″ × 22.8″)
M-1600/16 : 718 mm × 182 mm × 580 mm (28.3″ × 7.2″ × 22.8″)

Weight

M-1600/24 : 26 kg (57.3 lbs.)
M-1600/16 : 20 kg (44.1 lbs.)

■ In these specifications :
0dBV = 1.0V, 0dBm/0dBu = 0.775V

■ Changes in specifications and features may be made without notice or obligation.

■ 仕様・外観などは、改善のため予告なく変更することがあります。

2. OPTIONAL FEATURES

仕様変更

1. Changing EQ Hinge Points (Refer to Fig. 2-1)

To change the hinge point of HI EQ (12 kHz) to 8 kHz, add a jumper to the area of serigraph 8k, as shown.

To change the hinge point of LO EQ (80 Hz) to 120 Hz, remove C133 and C134.

2. Switching LINE IN (BAL) jacks (on channels 1-8) to mic inputs (Refer to Fig. 2-1)

Remove R103 and R104, and short-circuit the HOT terminal of J101 to C111 and COLD terminal to C112 by using jumpers, as shown. The nominal level of the LINE IN jacks is then the same as that of the MIC IN jacks.

3. Using GROUP OUTPUT (DIRECT OUTPUT) jacks as unbalanced connectors (Refer to Fig. 2-1)

The cold connection of each jack needs to be "opened". One way is to use appropriate adaptor cables. An alternative way is to remove W217.

4. Using TAPE RETURNS jacks as unbalanced connectors (Refer to Fig. 2-2)

To wire the jacks as unbalanced connectors, their cold conductors can either be "opened" or short-circuited to ground. The latter approach is advantageous in regard to the jack performance. If there are difficulties in making or using cable adaptors, short-circuit to ground the # 15 terminal of P201 through P208 on the BUSS (A1) PCB and BUSS (A2) PCB.

5. Cutting cable shields when connecting MTRs (Refer to Fig. 2-3)

All signals entering into, and going out of the D-SUB connectors are grounded at a single point on the D-SUB PCB. When connecting MTRs if the cable shields need to be cut to eliminate hum or ground loop by using appropriate cable adaptors. One another way is to cut the conductor on the D-SUB PCB, as shown.

6. Adding Peak Hold function (Refer to Fig. 2-4)

By relocating the wire W1 to twelve o'clock position, as shown, a peak hold function is added to the monitor level meters.

Similarly, a peak hold function can be added to the group level meters by relocating the wire W2 to twelve o'clock position, as shown.

1. EQの周波数変更（図2-1参照）

8Kのシルク部分にジャンパー線をマウントすることにより、HI EQ（12kHz）を8kHzに変更することができます。
また、C133, C134を外すことにより、LOW EQ（80Hz）を120Hzに変更することができます。

2. CH1～8のLINE IN（BAL）端子をマイク・インプットとして使用する場合の対応（図2-1参照）

R103, R104を外し、J101のHOT端子とCOLD端子をそれぞれC111, C112にショートする（図2-1のようにジャンパー線でショートする）ことにより、LINE INの入力レベルがMIC INの入力レベルと同じになります。

3. GROUP OUTPUT（DIRECT OUTPUT）端子にアンバランス機器を接続する場合の対応（図2-1参照）

GROUP OUTPUT（DIRECT OUTPUT）端子をアンバランス接続で使用する場合は、COLD端子をオープンにする必要があります。ケーブルでの対応が難しい場合は、W217を外すことによりCOLD端子をオープンにすることができます。

4. TAPE RETURNS端子にアンバランス機器を接続する場合の対応（図2-2参照）

TAPE RETURNS端子をアンバランス接続で使用する場合は、COLD端子はオープンにしてもグランドとショートしても使えますが、後者の方が特性としては有利です。
ケーブルでの対応が難しい場合は、BUSS（A1）PCB, BUSS（A2）PCBのP201～P208の15番端子をグランドとショートします。

5. MTR接続時のシールド・カットについて（図2-3参照）

D-SUB端子に入出力される信号のグランドはDSUB PCBで1つにまとまっています。
MTRとの接続時にグランド・ループ・ハム対策のためのシールド・カットが必要になったときに、ケーブルによる対応が難しい場合は、D-SUB PCBのパターン・カットにより行うことができます。

6. ピーク・ホールド機能の追加（図2-4参照）

W1を90度向きを変えてマウントすることにより、モニター・レベル・メーターにピーク・ホールド機能を追加することができます。
同様に、W2を90度向きをマウントすることにより、グループ・レベル・メーターにピーク・ホールド機能を追加することができます。

7. Optional Features Available When Mounting the MU-1624/1616 Meter Unit

1) Group level meter source mod (Refer to Fig. 2-5)

For the group level meters to register AUX SEND signals, locate the bundle of wires which runs from the METER PCB to P5 of the MASTER PCB, disconnect it from the MASTER PCB, and connect it to P002 of the JACK I/O PCB, as shown. (This modification makes meters 7 and 8 inoperative.)

2) Meter unit's L/R meter source mod (Refer to Fig. 2-5 & Fig. 2-6)

Wire P5 of the METER PCB to P003 of the JACK I/O PCB, as shown in Fig. 2-5, then either of two options can be selected depending on whether the bundle of wires which runs from the meter unit is connected to P4 or to P6, as shown in Fig. 2-6.

When connected to P4 (standard configuration) :
  the L/R meter is switched to the MONITOR OUTPUT.
When connected to P6 :
  the L/R meter is switched to the STEREO OUTPUT.

3) Channel meters' source mod (Refer to Fig. 2-6)

The pins of connector P101 to which the meter unit is connected are assigned as follows :

pin 1 : Tape returns
pin 2 : Channel inputs (after TAPE switch)
pin 3 : Group outputs
pin 4 : Post-fader signals

As standard, pins 1 and 3 are connected to the meter unit. By relocating the two leads on each of the plugs, the leads that run from the meter unit, the channel meters of the meter unit can be switched to any combination of two sources amongst those specified above.

7. メーター・ユニットMU-1616／MU-1624を使用した場合のオプション機能

1) グループ・レベル・メーターへの信号変更について（図2-5参照）

METER PCBからMASTER PCBのP5に接続されている線材をJACK I/O PCBのP002に繋ぎ変えることにより、グループ・レベル・メーターにAUX SEND信号を表示させることができます。（この場合、グループ・レベル・メーターの7, 8には何も表示しません）

2) メーター・ユニットのL/Rメーターへの信号変更について（図2-5, 図2-6参照）

METER PCBのP5とJACK I/O PCBのP003を接続することにより（図2-5）、メーター・ユニットからの線材を図2-6のP4に接続するかP6に接続するかを選択することができるようになります。
P4に接続した場合（標準仕様）: L/RメーターはMONITOR OUTPUT信号を表示します。
P6に接続した場合 : L/RメーターはSTEREO OUTPUT信号を表示します。

3) メーター・ユニットのチャンネル・メーターへの信号変更について（図2-6参照）

メーター・ユニットへの接続用コネクターP101のピン配列は次の通りです。

1番ピン : TAPE RETURN信号
2番ピン : CHANNEL INPUT（TAPEスイッチの後）信号
3番ピン : GROUP OUT（DIRECT OUT）信号
4番ピン : POST FADER信号

標準仕様（工場出荷時）は、1番ピンと3番ピンがメーター・ユニットに接続されるようになっています。
メーター・ユニットからの線のプラグのピンを差し替えることにより、上記のいずれかの組み合わせを選択することができます。

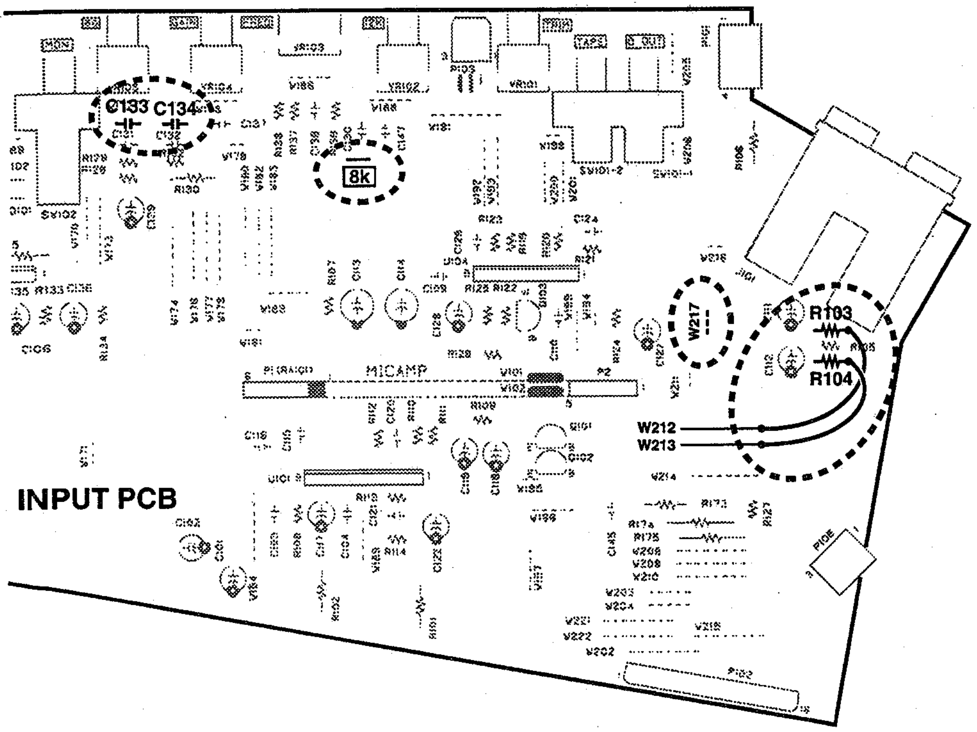

C133
C134
8k
W217
R103
R104
W212
W213
MICAMP
INPUT PCB

Fig. 2-1

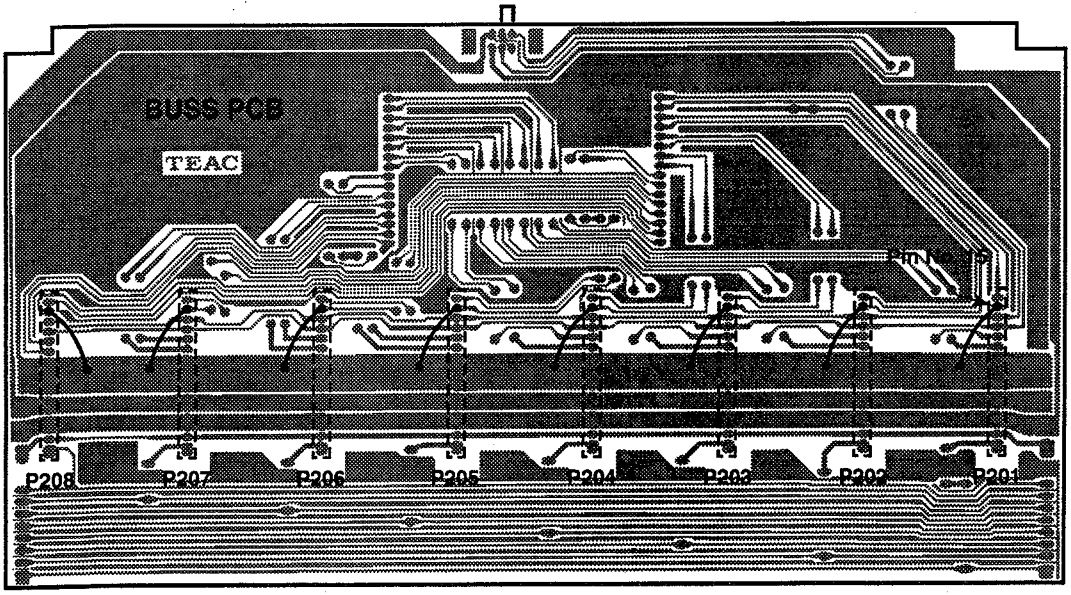

BUSS PCB
TEAC
Pin No. 15
P208
P207
P206
P205
P204
P203
P202
P201

Fig. 2-2

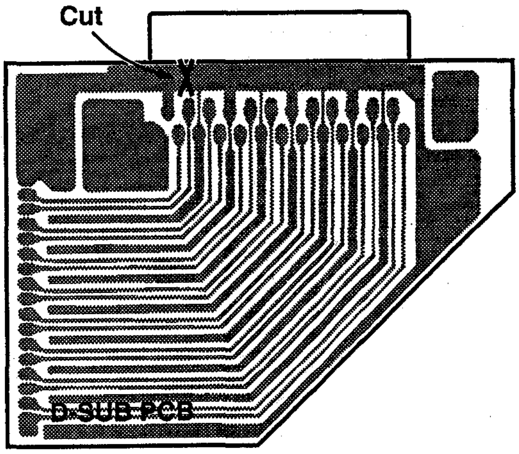

Cut
D-SUB PCB

Fig. 2-3

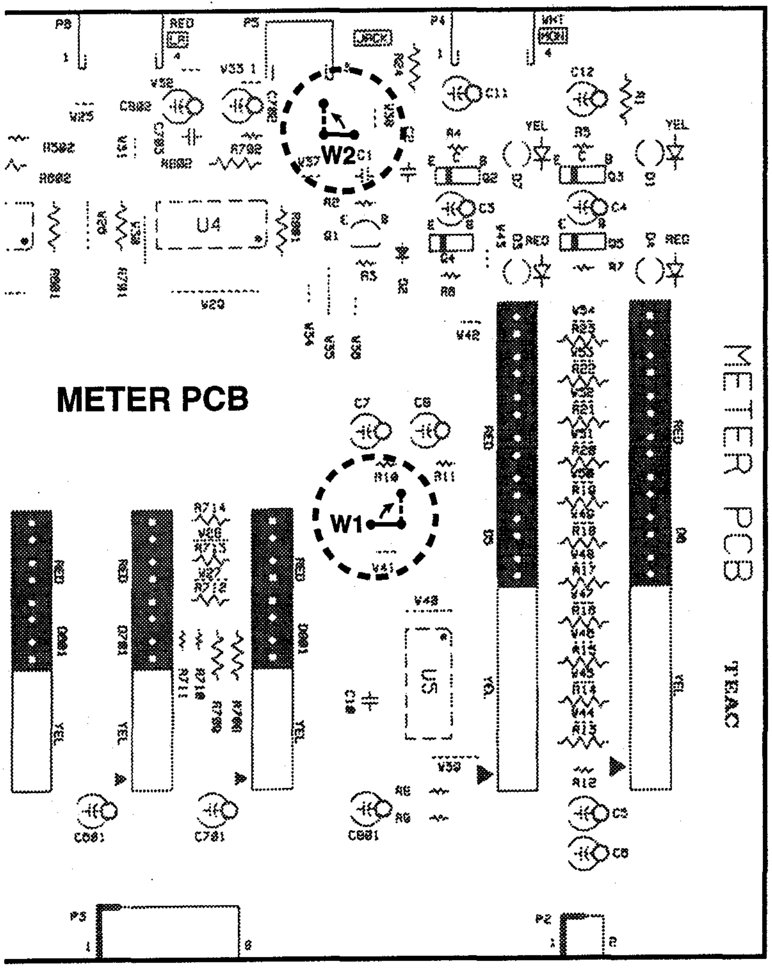

METER PCB
W1
W2
U4
U5
P3
P4
P5
P8
P2
JACK
MON
RED
YEL
METER PCB
TEAC

Fig. 2-4

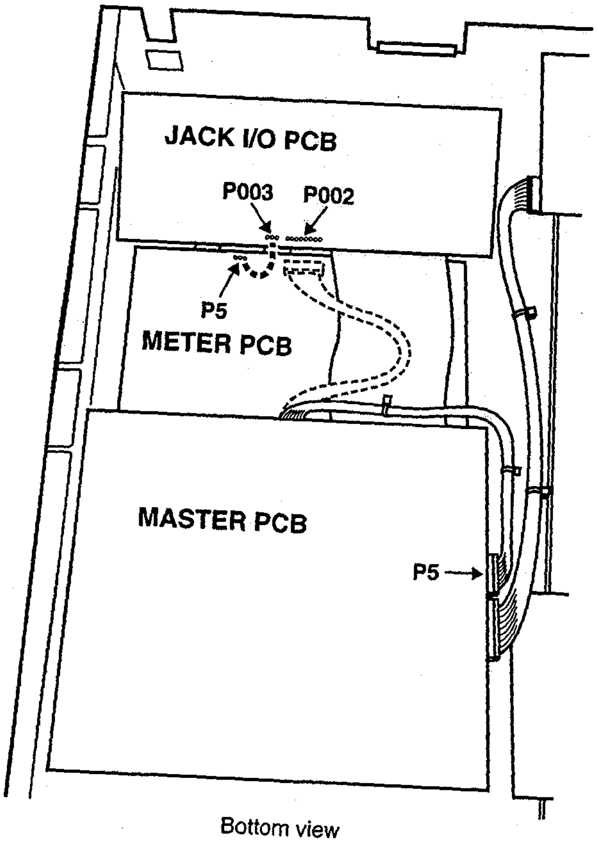

JACK I/O PCB
P003
P002
P5
METER PCB
MASTER PCB
P5

Fig. 2-5

Bottom view

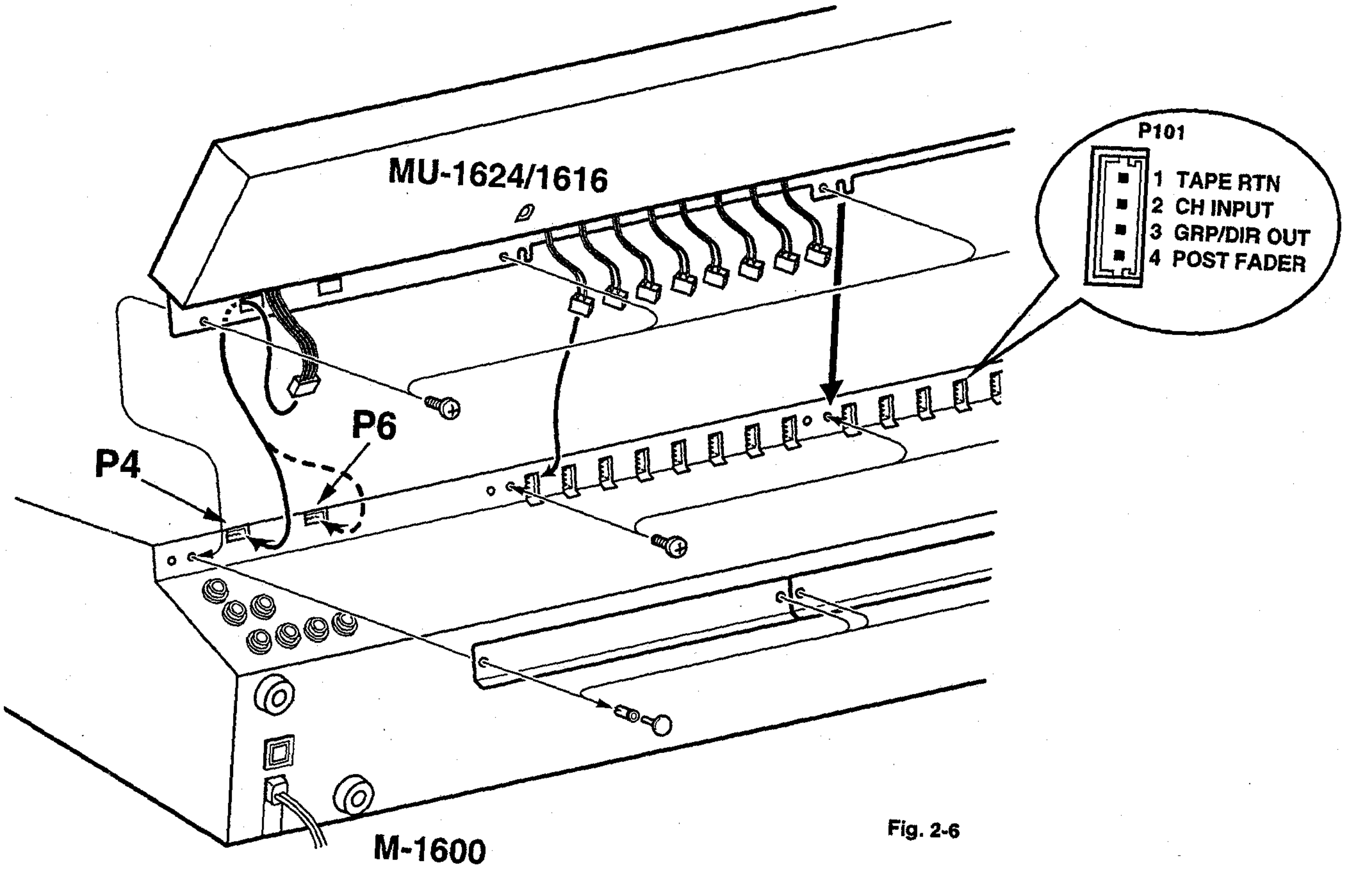

MU-1624/1616
P101
1 TAPE RTN
2 CH INPUT
3 GRP/DIR OUT
4 POST FADER
P6
P4
M-1600

Fig. 2-6

PARTS LIST SECTION

NOTES

- PC boards shown are viewed from parts side.
- Parts marked with ＊ require longer delivery time.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components. They must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.
- Parts not shown in the parts lists, or parts, though listed, having no parts numbers, are not general "ready-to-supply" parts.
- Parts of [ ] mark can be used only with the version designated.
  [US/C]:U.S.A./CANADA [E]:EUROPE [UK]:U.K. [J]:JAPAN

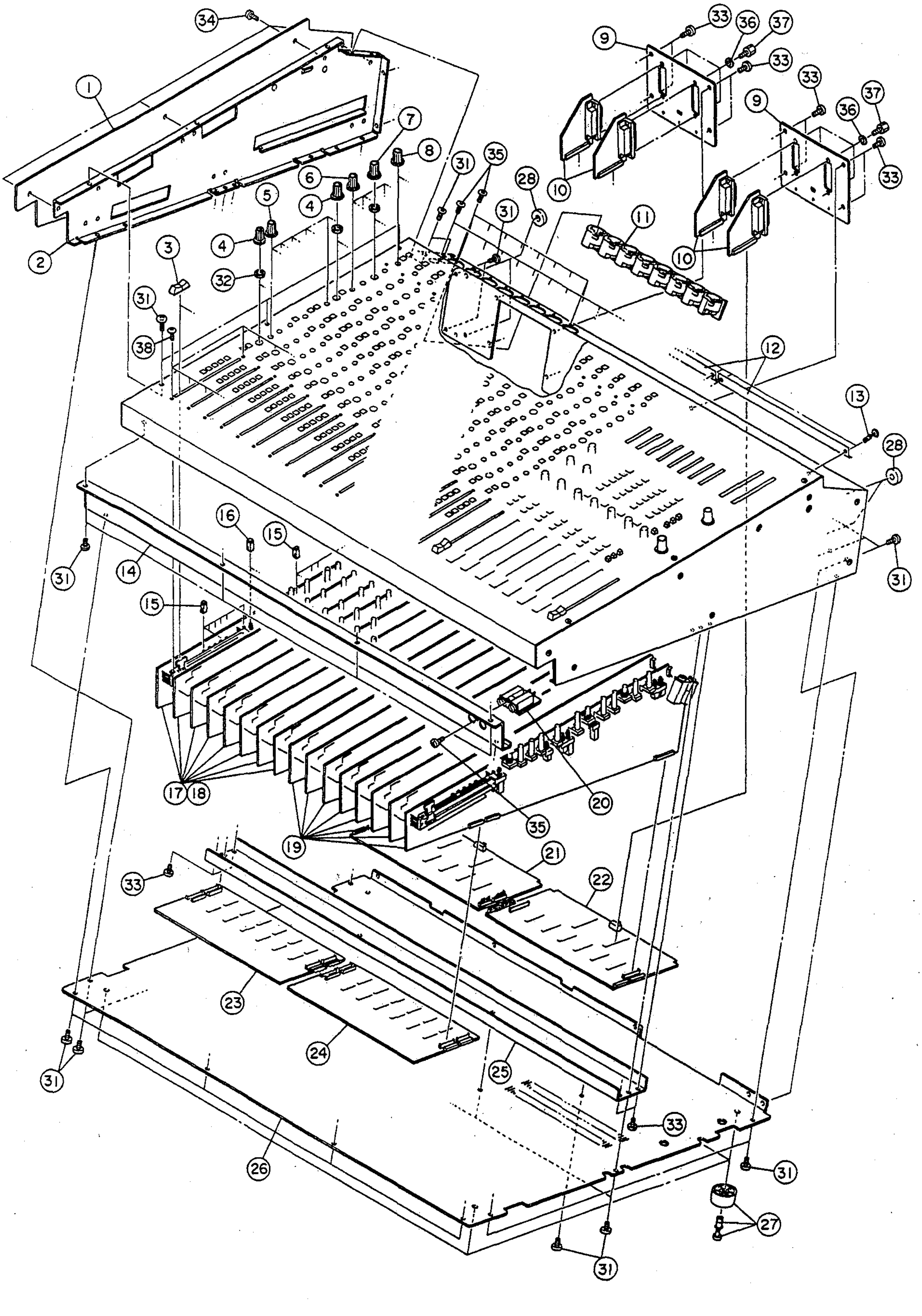
注 意

- プリント基板図は部品面が示されています。
- ＊印の部品は納期が若干かかります。
  あらかじめご了承ください。
- 標準の抵抗、コンデンサーは省略してあります。
  回路図を参照してください。
- ⚠印は安全重要部品です。
  交換する時は必ずティアック指定の部品を使用してください。
- リストされていない部品は原則としてサービス供給部品として取扱っていません。
- 仕向先
  [US/C]:U.S.A./CANADA [E]:EUROPE [UK]:U.K. [J]:JAPAN

3. EXPLODED VIEWS AND PARTS LIST

分解図とパーツ・リスト

EXPLODED VIEW-1



34
33
36
37
9
33
1
33
9
36
37
7
8
6
35
31
28
33
5
4
31
10
11
4
3
10
2
32
31
38
12
13
28
16
15
31
14
31
15
17
18
20
35
19
21
33
22
23
24
31
25
33
26
31
27
31

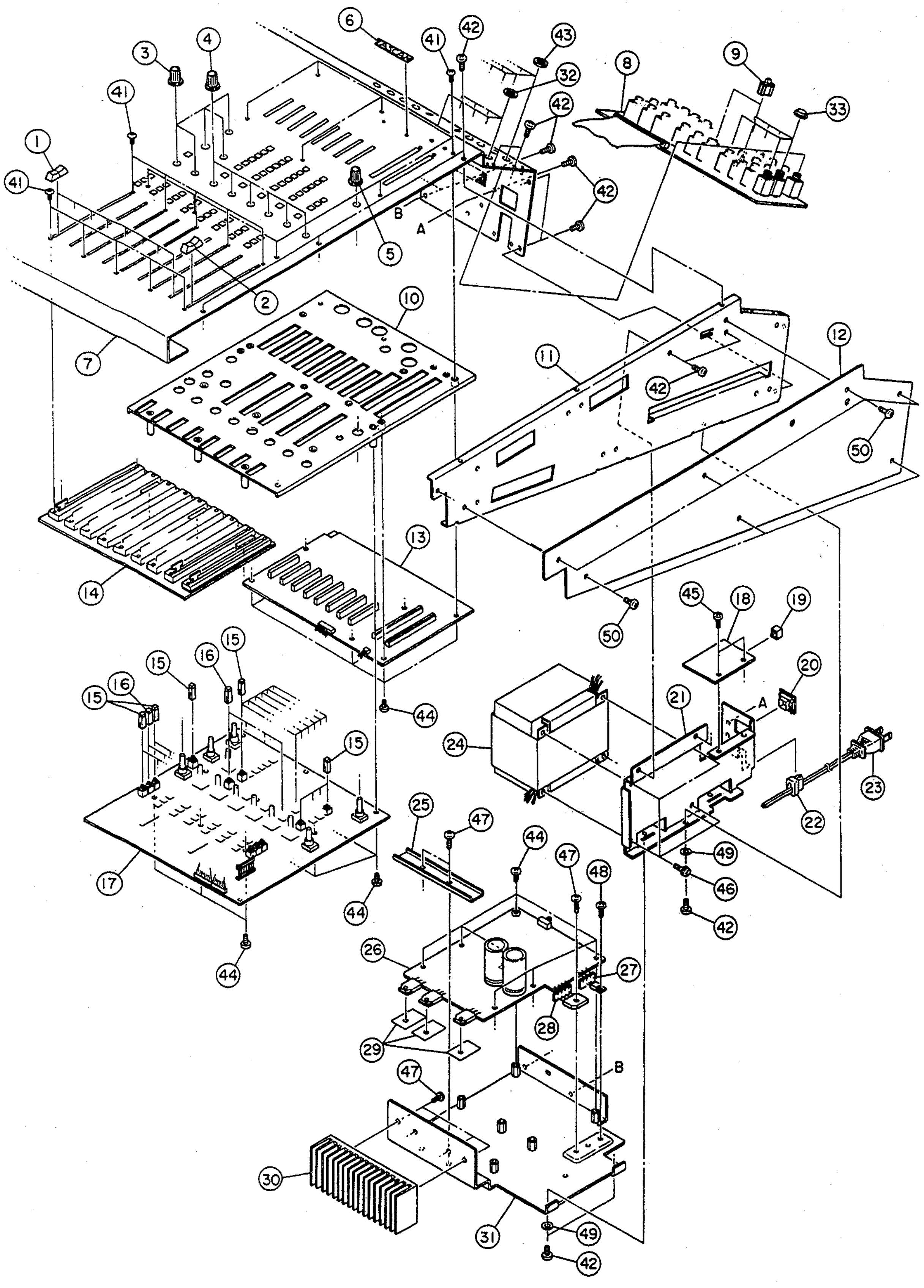
EXPLODED VIEW-1

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1- 1	*9260268302	SIDE PANEL(L)	
1- 2	*9260267301	SIDE CHASSIS (L)	
1- 3	5801632100	KNOB, S-VR N61/N66	
1- 4	5801631700	KNOB, R-VR N61/N63	
1- 5	5801631900	KNOB, R-VR N61/G06	
1- 6	5801632000	KNOB, R-VR N61/B10	
1- 7	M00046000A	KNOB, R-VR N61/B12	
1- 8	M00103500A	KNOB, R-VR N61/R21	
1- 9	*9260268501	PANEL, DSUB	
1-10	*9145170100	DSUB PCB ASSY	
1-11	*9145172301	XLR PCB ASSY	
1-12	*9260268401	COVER, CONNECT	
1-13	*9260270500	PUSH RIVET, P2642(B)	
1-14	*9260268601	FRONT CHASSIS, 16 [M-1600/16]	
	*9260268701	FRONT CHASSIS, 24 [M-1600/24]	
1-15	5801632501	PUSH BUTTON COVER, WHT/N63	
1-16	M00103800A	KNOB, BUTTON COVER WHT/R21	
1-17	*9145169102	INPUT A PCB ASSY(1CH-8CH)	
1-18	*9145168100	MIC AMP PCB ASSY	
1-19	*9145169202	INPUT B PCB ASSY(9CH-24CH)	
1-20	*9145174301	H. PHONE PCB ASSY	
1-21	*9145170200	BUSS (A1) PCB ASSY	
1-22	*9145171101	BUSS (A2) PCB ASSY	
1-23	*9145170302	BUSS (B1) PCB ASSY	
1-24	*9145171201	BUSS (B2) PCB ASSY	
1-25	*9260268101	BOTTOM SUPPORT, 24 [M-1600/24]	
	*9260268901	BOTTOM SUPPORT, 16 [M-1600/16]	
1-26	*9260267200	BOTTOM PANEL, 24 [M-1600/24]	
	*9260267700	BOTTOM PANEL, 16 [M-1600/16]	
1-27	*9260233100	FOOT, FF015 KOYO	
1-28	*9260270300	FOOT, FF009 KOYO	
1-31	*9783244008	SCREW, BTT-B M4X8(BLK)	
1-32	*9781801000	REC VR NUT, M9	
1-33	*9783243006	SCREW, BTT-B M3X6(BLK)	
1-34	*9780504006	SCREW, BH M4X6(BLK)	
1-35	*9783613008	SCREW, BTT-P M3X8(BLK)	
1-36	*9294209400	WASHER, φ5Xφ3X0.5T(NI)	
1-37	*9783802612	SCREW, LOCK	
1-38	*9783573004	SCREW, WHIS BIND M3X4(BLK)	

INCLUDED ACCESSORIES

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	*9101407600	OWNER'S MANUAL, ENGLISH [EXCEPT J]	
	*9101407700	OWNER'S MANUAL, FRENCH/GERMAN [E]	
	*9101407500	OWNER'S MANUAL, JAPAN [J]	

EXPLODED VIEW-2


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
41
42
43
44
45
46
47
48
49
50
A
B

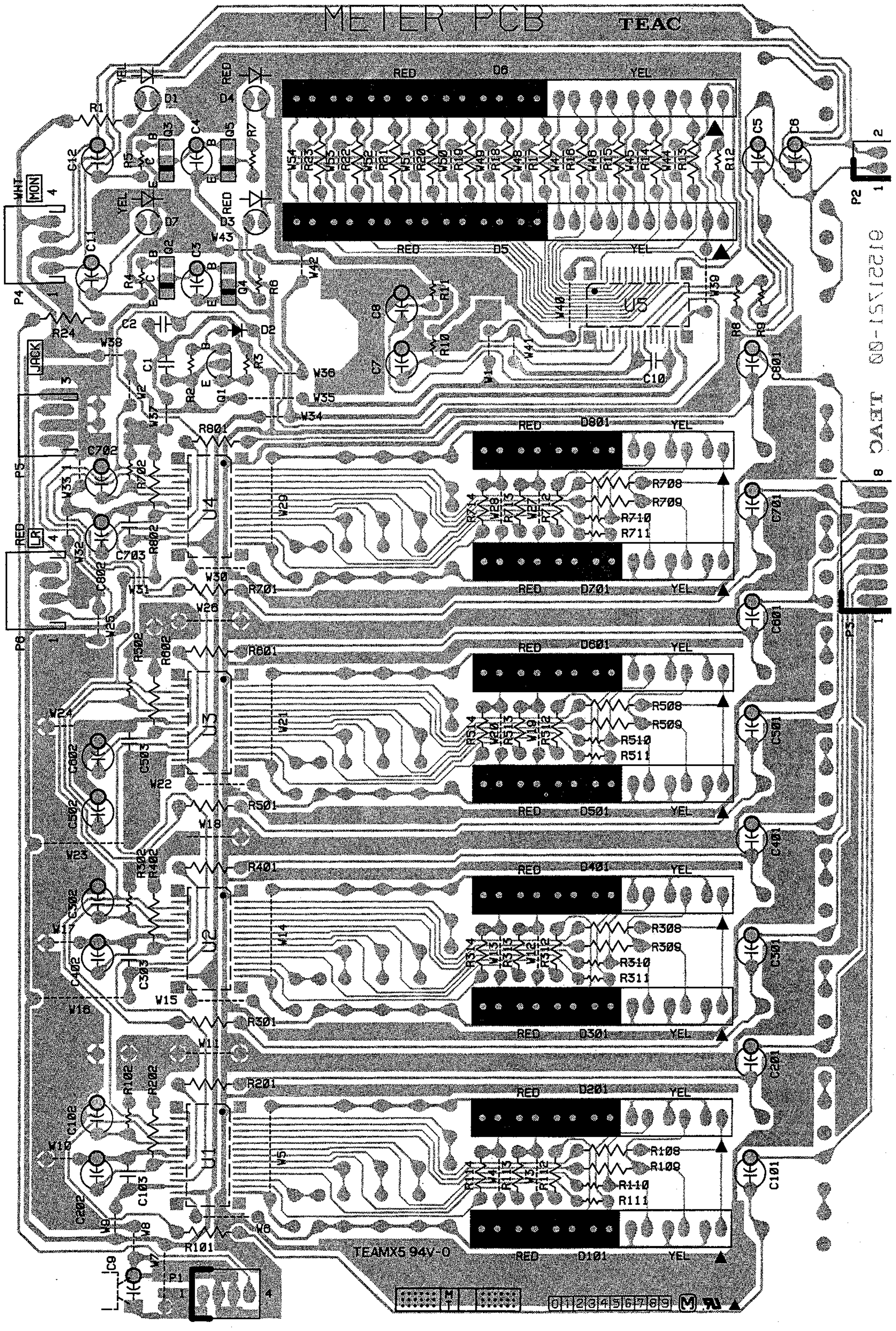
EXPLODED VIEW-2

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
2- 1	5801632300	KNOB, S-VR N63/N66	
2- 2	M00103701A	KNOB, S-VR R21/N61	
2- 3	9260265600	KNOB, R-VR N61/G06	
2- 4	9260265500	KNOB, R-VR N61/N66	
2- 5	9260265700	KNOB, R-VR N61/R21	
2- 6	*9260268800	TASCAM BADGE	
2- 7	*9260266904	TOP PANEL, 16 [M-1600/16]	
	*9260267804	TOP PANEL, 24 [M-1600/24]	
2- 8	*9145173202	JACK I/O PCB ASSY	
2- 9	M00006100A	KNOB, SLIDE GY	
2-10	*9260268001	SUB CHASSIS	
2-11	*9260267401	SIDE CHASSIS (R)	
2-12	*9260268202	SIDE PANEL(R)	
2-13	*9145172102	METER PCB ASSY	
2-14	*9145172201	FADER PCB ASSY	
2-15	9260263300	KNOB, BUTTON COVER WHT/N63	
2-16	9260263400	KNOB, BUTTON COVER WHT/R21	
2-17	*9145173102	MASTER PCB ASSY	
2-18	*9145174601	POWER SW PCB ASSY [J, US/C]	
	*9145174611	POWER SW PCB ASSY [E, UK]	
2-19	1678822807	BUTTON, POWER	
2-20	*5801486600	ESCUTCHEON, D P-N15-A	
2-21	*9260267901	BRACKET, PS	
2-22	⚠*9121000102	BUSHING, #2271	
2-23	⚠*9109025711	AC CORD, EUR CEE CLASS2 [E]	
	⚠*9109026910	AC CORD, SPT-2 [US]	
	⚠*9109027500	AC CORD [J]	
	⚠*9109028100	AC CORD [UK]	
2-24	⚠*9125114000	POWER TRANS, PZJ-1527	
2-25	*9260267500	BRACKET, TR	
2-26	*9145174101	POWER SUPPLY PCB ASSY [J, US/C]	
	*9145174111	POWER SUPPLY PCB ASSY [E, UK]	
2-27	*9145174201	U3 PCB ASSY	
2-28	*9145174501	BD PCB ASSY	
2-29	*9260217700	SHEET RADIATOR (25MMX20MM)	
2-30	*9260266701	HEAT SINK, CS-B2202-02317	
2-31	*9260267101	HEAT SINK, PS	
2-32	*9294209600	PVC WASHER	
2-33	*9294209700	INSULATER WASHER	
2-41	*9783573004	SCREW, WHIS BIND M3X4(BLK)	
2-42	*9783244008	SCREW, BTT-B M4X8(BLK)	
2-43	*9781801109	JACK NUT, M9(NI)	
2-44	*9780403006	SCREW, BH M3X6	
2-45	*9783243006	SCREW, BTT-B M3X6(BLK)	
2-46	*9780404008	SCREW, BH M4X8	
2-47	*9783213012	SCREW, BTT-B M3X12	
2-48	*9783213008	SCREW, BTT-B M3X8	
2-49	*9788840100	LOCK WASHER	
2-50	*9780504006	SCREW, BH M4X6(BLK)	

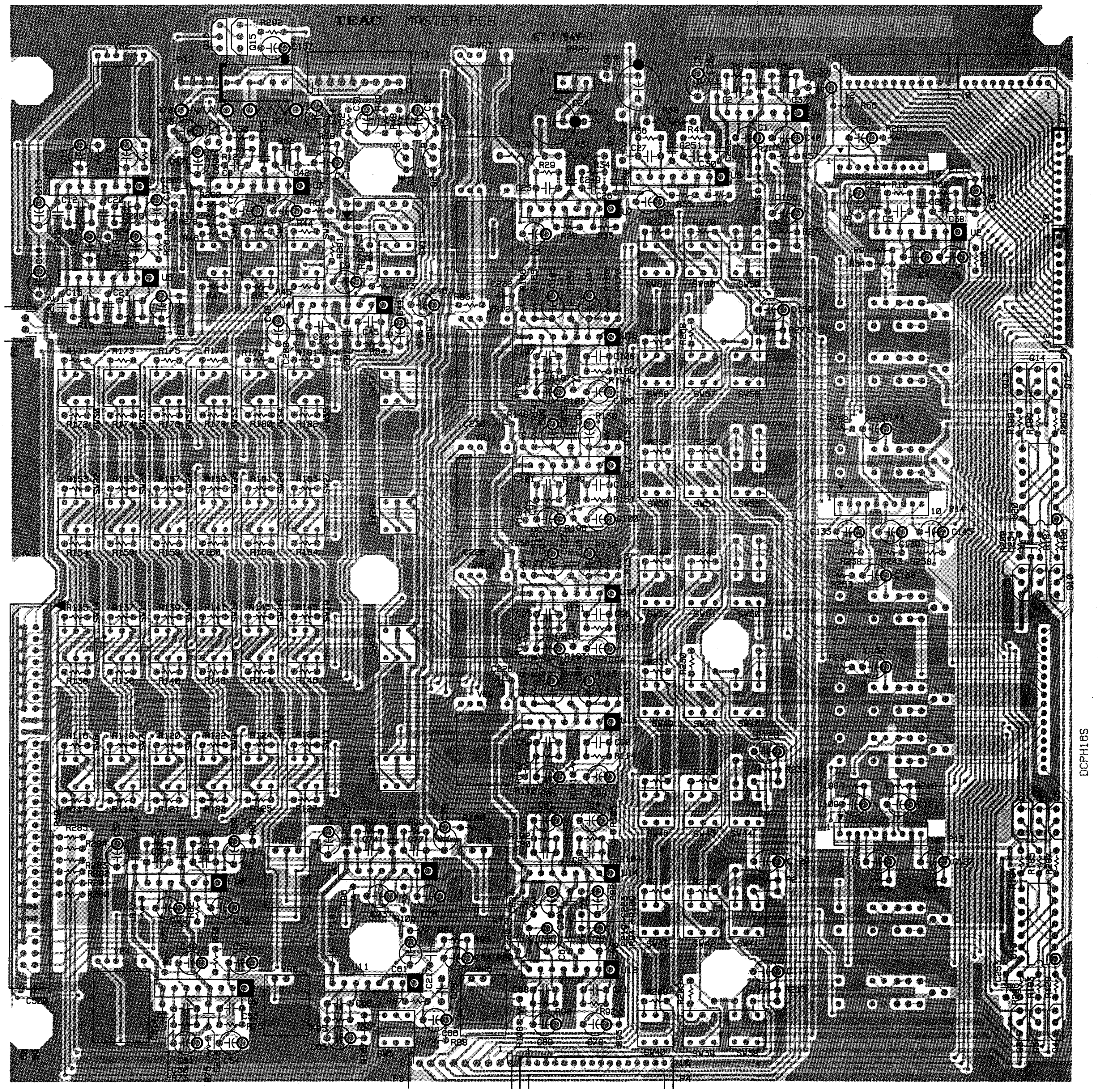
4. PC BOARDS AND PARTS LIST

基板図とパーツ・リスト

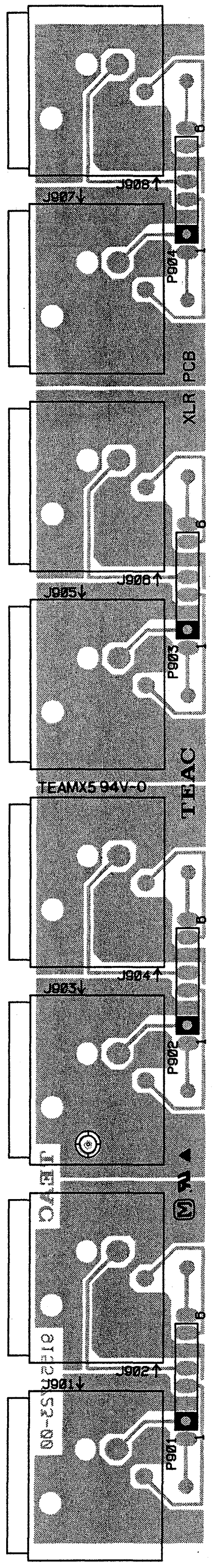
METER PCB


METER PCB
TEAC
RED
D6
YEL
D1
D4
D7
D3
D5
R1
R5
R4
Q3
Q5
Q2
Q4
C4
C3
C12
C11
R7
R6
W43
W42
W54
R33
W55
R32
W53
R22
W52
R21
W51
R20
W50
R19
W49
R18
W48
R17
W47
R16
W46
R15
W45
R14
W44
R13
R12
C5
C6
P2
WHT
MON
P4
R24
W38
JACK
C2
D2
C1
R2
R3
Q1
W36
W35
W34
C8
C7
R11
R10
W40
W41
U5
W39
R8
R9
C10
C801
0152171-00
TEAC
R801
D801
C702
R702
W33
W37
W2
P5
U4
W29
R714
W28
R715
W27
R712
R708
R709
R710
R711
C701
R802
C703
W32
RED
LR
C802
W31
W30
R701
D701
W26
W25
P6
P3
R502
R602
R601
C601
D601
R508
R509
R510
R511
R514
W20
R513
W19
R512
W24
C602
C503
U3
W21
W22
R501
D501
C501
C502
W18
W23
R302
R402
R401
D401
C401
C302
W17
C402
C303
U2
W14
R314
W13
R315
W12
R312
R308
R309
R310
R311
C301
W16
W15
R301
D301
W11
R102
R202
R201
D201
C201
C102
W10
C103
U1
W5
R114
W4
R113
W3
R112
R108
R109
R110
R111
C101
C202
W9
W8
W6
R101
D101
TEAMX5 94V-0
C9
W7
P1
0 1 2 3 4 5 6 7 8 9

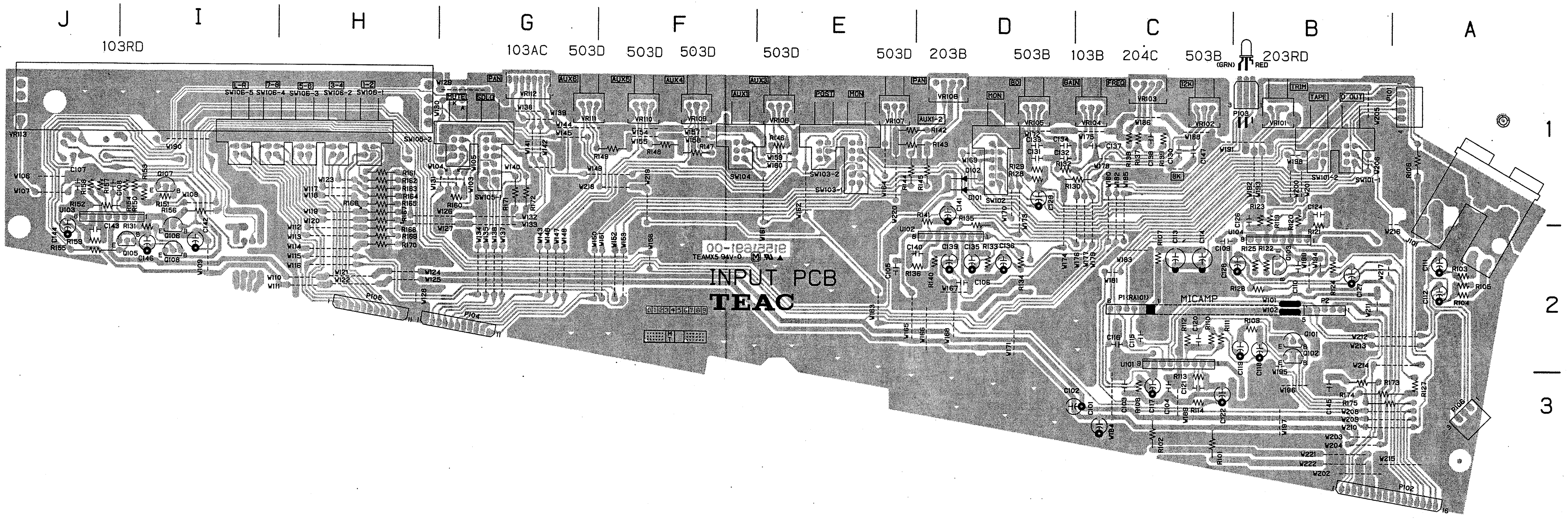
MASTER PCB


TEAC MASTER PCB
ST 1 94V-0
DCPH16S

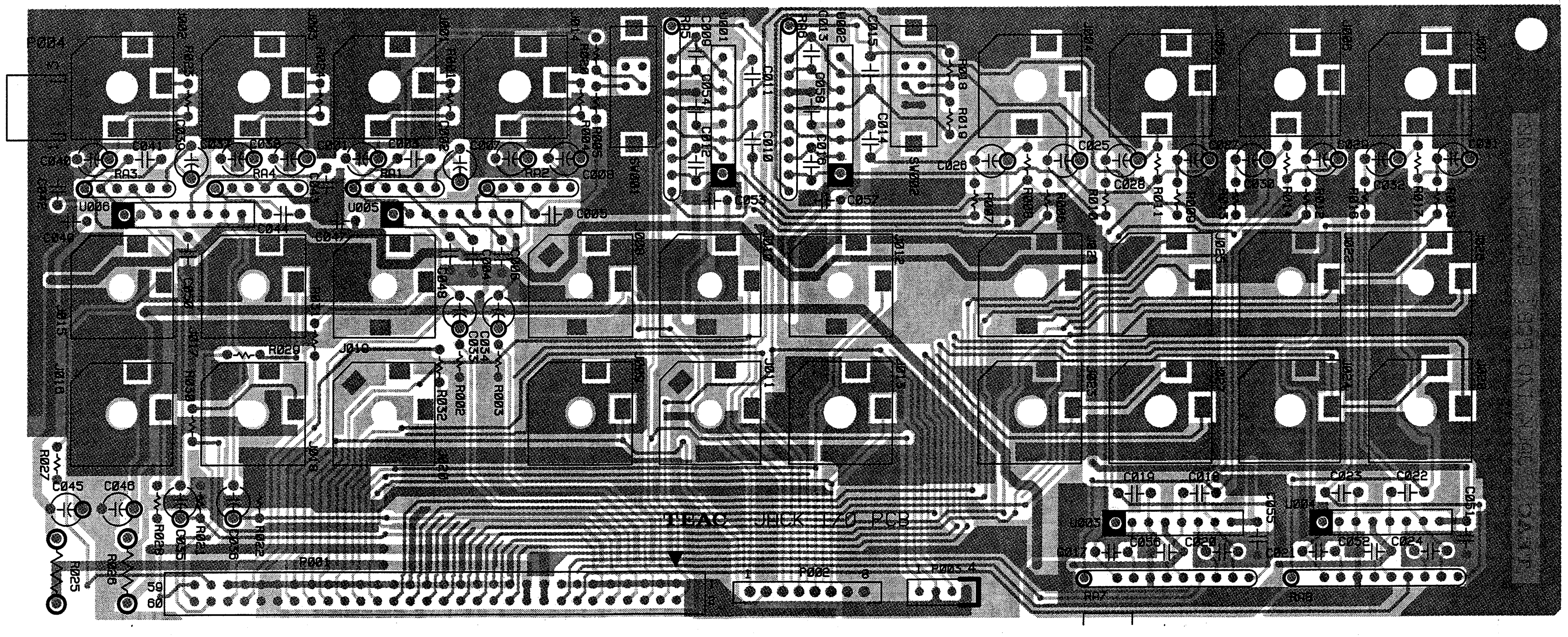
XLR PCB


XLR PCB
TEAMX5 94V-0
TEAC
J908
J907
J906
J905
J904
J903
J902
J901
P904
P903
P902
P901

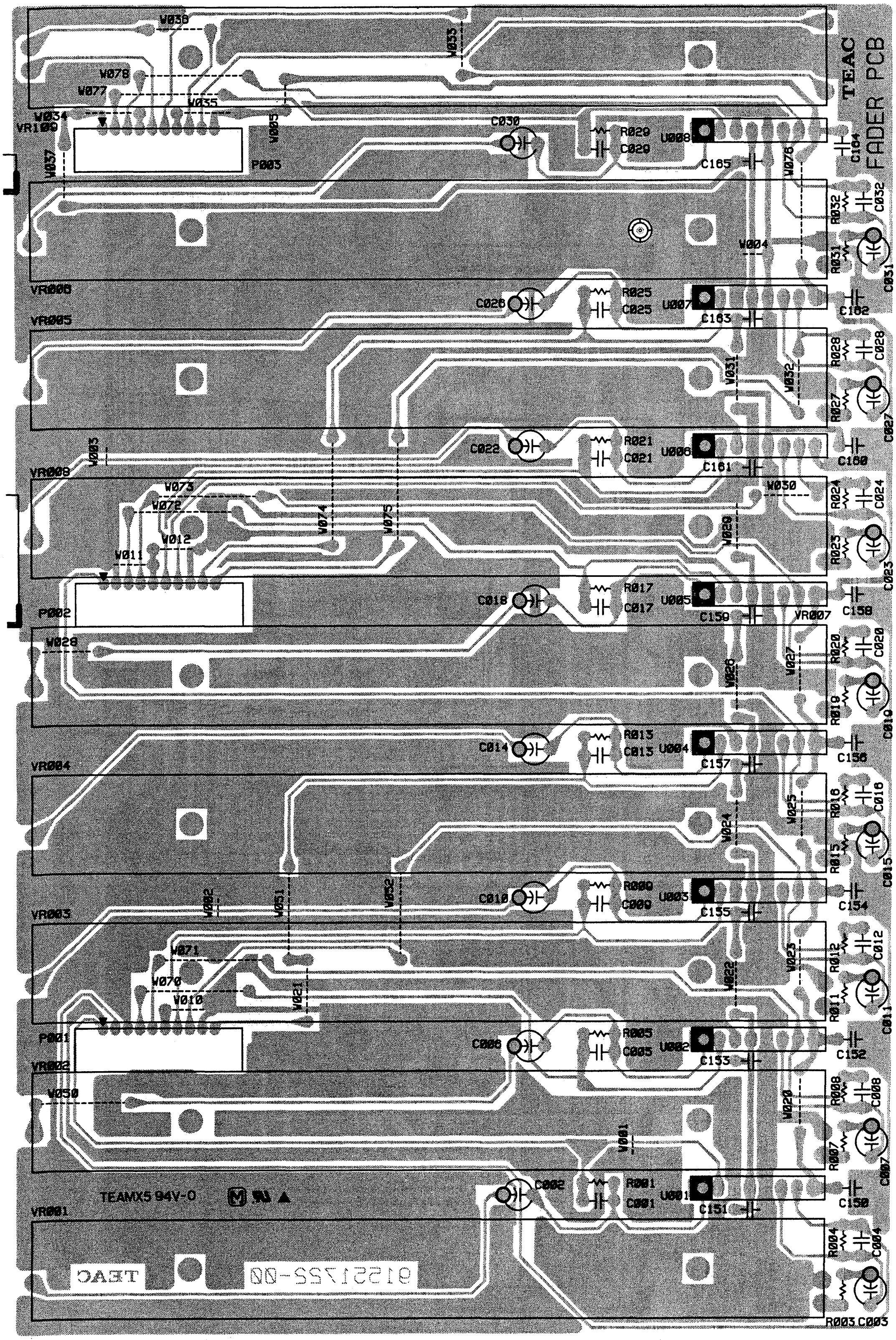
INPUT PCB


J
I
H
G
F
E
D
C
B
A
103RD
103AC
503D
503D
503D
503D
503D
203B
503B
103B
204C
503B
(GRN)
RED
203RD
1
2
3
INPUT PCB
TEAC
MICAMP

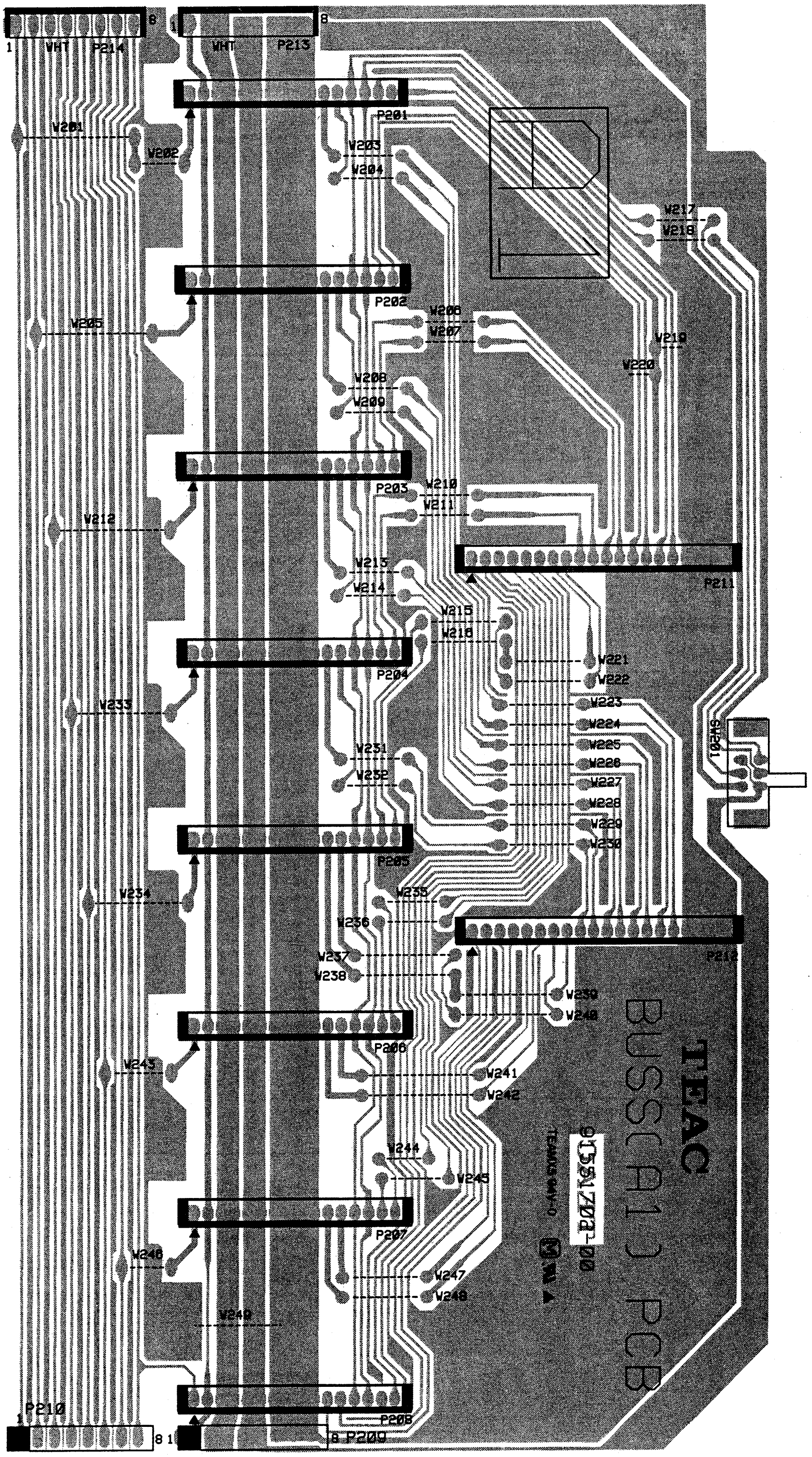
JACK I/O PCB


TEAC JACK I/O PCB

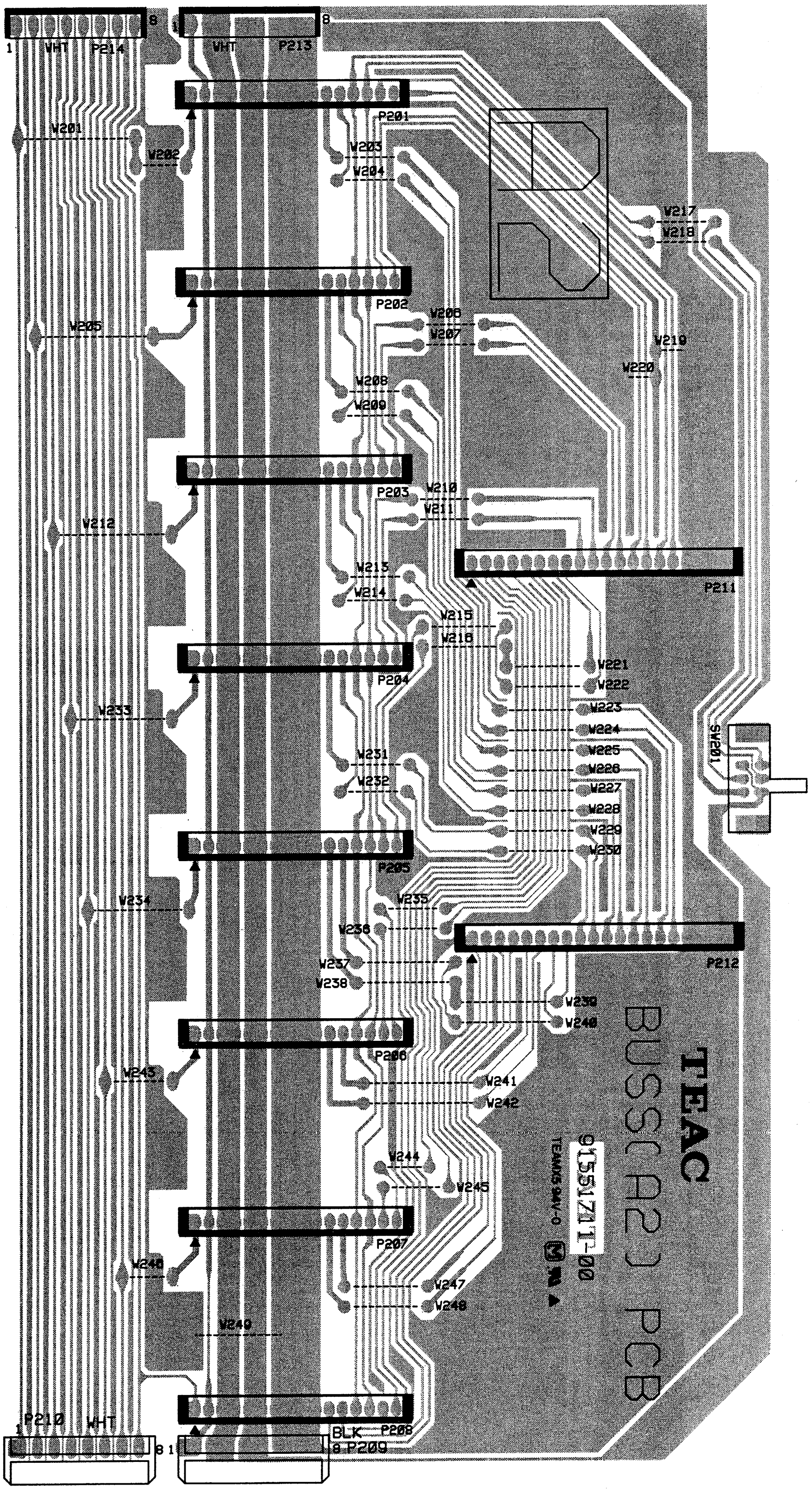
FADER PCB


TEAC FADER PCB
W036
W033
W078
W077
W035
W034
VR100
W005
P003
W037
C030
R029
C029
U008
C165
W076
C164
R032
C032
W004
R031
C031
VR008
VR005
C026
R025
C025
U007
C163
C162
R028
C028
W031
W032
R027
C027
C022
R021
C021
U006
C161
C160
W003
VR009
W073
W072
W074
W075
W029
W030
R024
C024
W012
W011
R023
C023
C018
R017
C017
U005
C159
VR007
C158
P002
W028
W026
W027
R020
C020
R019
C019
C014
R013
C013
U004
C157
C156
VR004
R016
C016
W024
W025
R015
C015
W002
W051
W052
C010
R009
C009
U003
C155
C154
VR003
W071
W070
W010
W021
W022
W023
R012
C012
R011
C011
P001
VR002
C006
R005
C005
U002
C153
C152
W050
W020
R008
C008
W001
R007
C007
TEAMX5 94V-0
C002
R001
C001
U001
C151
C150
VR001
R004
C004
R003
C003

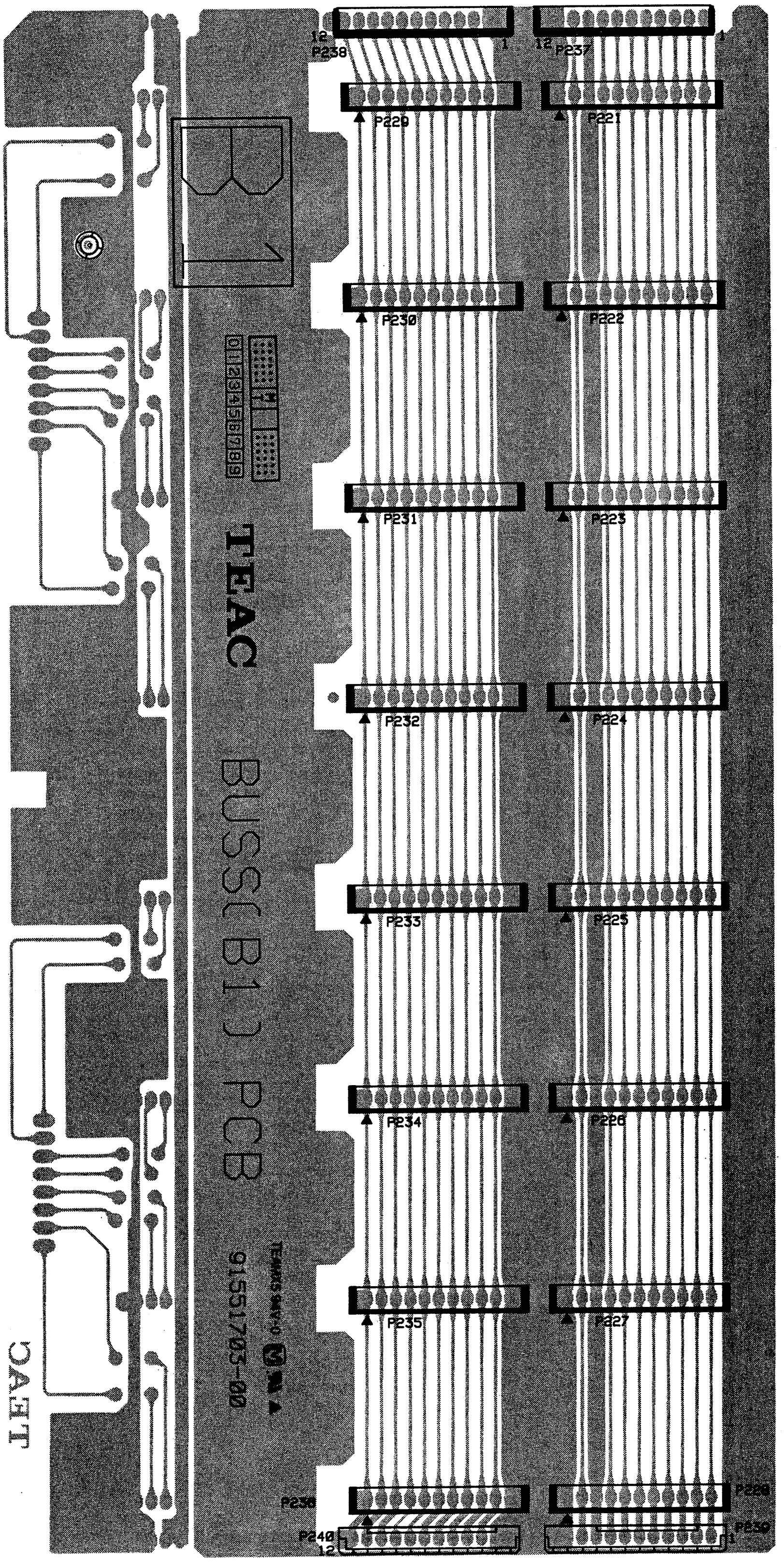
BUSS A1 PCB


1
WHT
P214
8
1
WHT
P213
8
P201
W201
W202
W203
W204
W217
W218
P202
W205
W206
W207
W219
W220
W208
W209
P203
W210
W211
W212
W213
W214
P211
W215
W216
W221
W222
P204
W223
W224
W225
W226
W227
W228
W229
W230
SW201
W233
W231
W232
P205
W234
W235
W236
W237
W238
P212
W239
W240
P206
W243
W241
W242
W244
W245
P207
W246
W247
W248
W249
P210
1
8
1
8
P209
P208
TEAC
BUSS(A1) PCB
9155170A-00
TEAMX3 94V-0

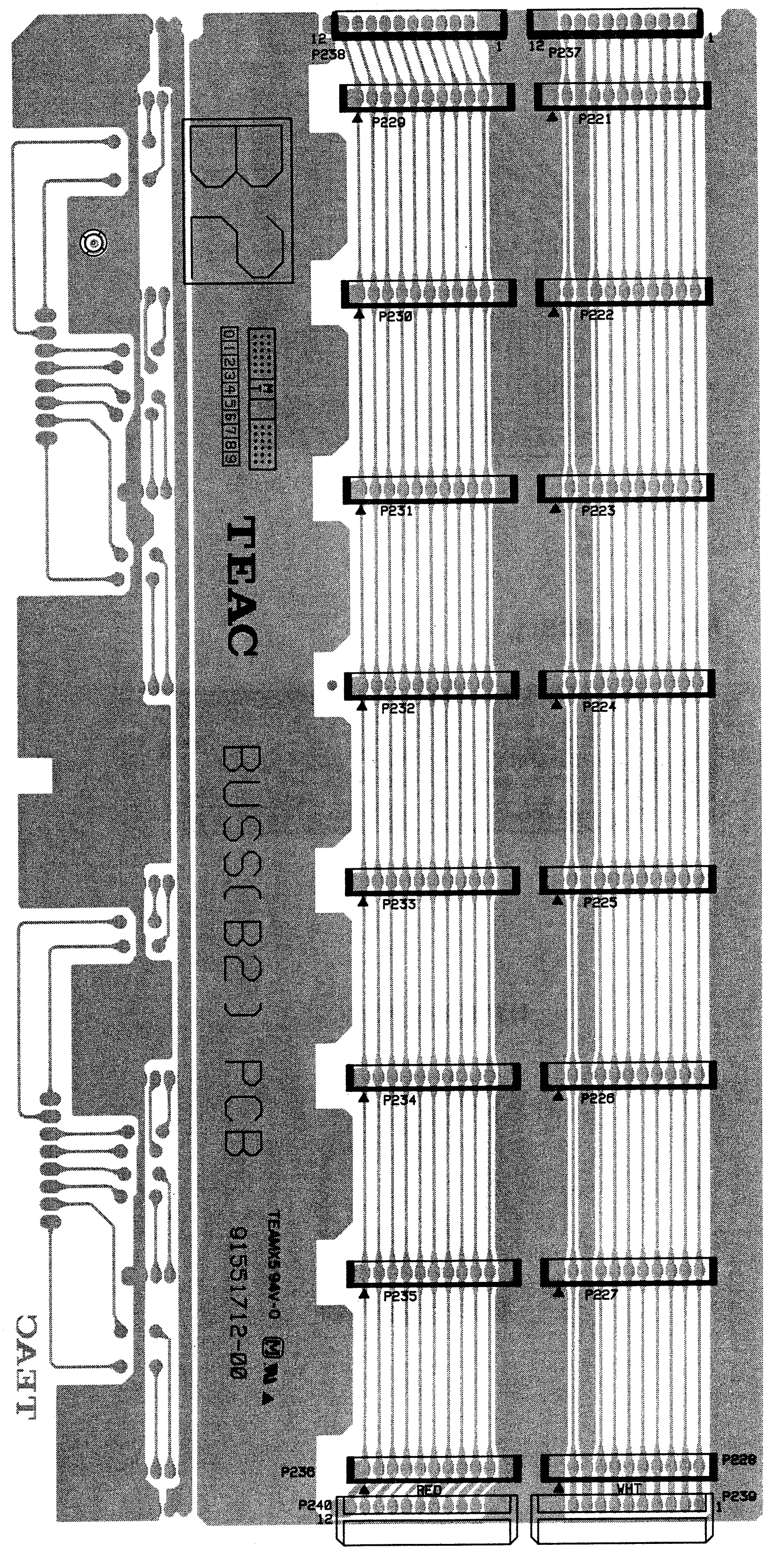
BUSS A2 PCB


1
WHT
P214
8
1
WHT
P213
8
P201
P202
P203
P204
P205
P206
P207
P208
P209
P210
P211
P212
W201
W202
W203
W204
W205
W206
W207
W208
W209
W210
W211
W212
W213
W214
W215
W216
W217
W218
W219
W220
W221
W222
W223
W224
W225
W226
W227
W228
W229
W230
W231
W232
W233
W234
W235
W236
W237
W238
W239
W240
W241
W242
W243
W244
W245
W246
W247
W248
W249
SW201
BLK
TEAC
BUSS(A2) PCB
91551711-00
TEAMX5 94V-0

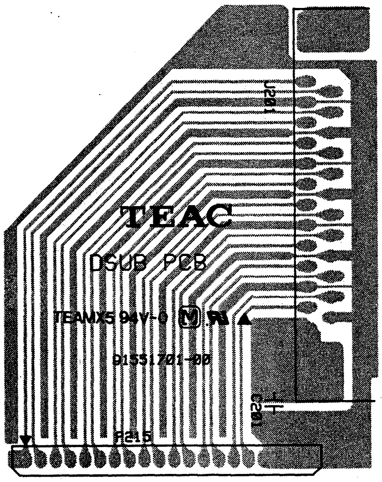
BUSS B1 PCB


12
P238
1
12
P237
1
P220
P221
P230
P222
P231
P223
P232
P224
P233
P225
P234
P226
P235
P227
P236
P228
P240
12
P239
1
B1
TEAC
BUSS(B1) PCB
91551703-00

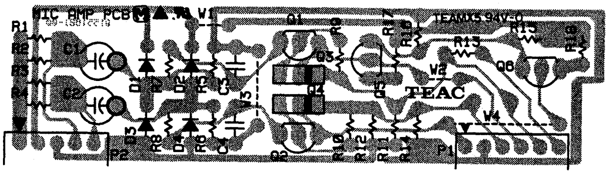
BUSS B2 PCB


12
P238
1
12
P237
1
P229
P221
B2
P230
P222
0123456789
TEAC
P231
P223
P232
P224
BUSS(B2) PCB
P233
P225
P234
P226
TEAMX5 94V-0
91551712-00
P235
P227
P236
P228
RED
WHT
P240
P239
12
1

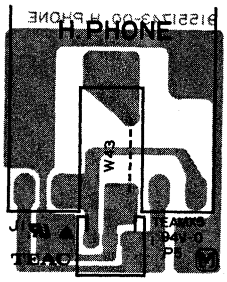
DSUB PCB


J201
TEAC
DSUB PCB
TEAMX5 94V-0
91551701-00

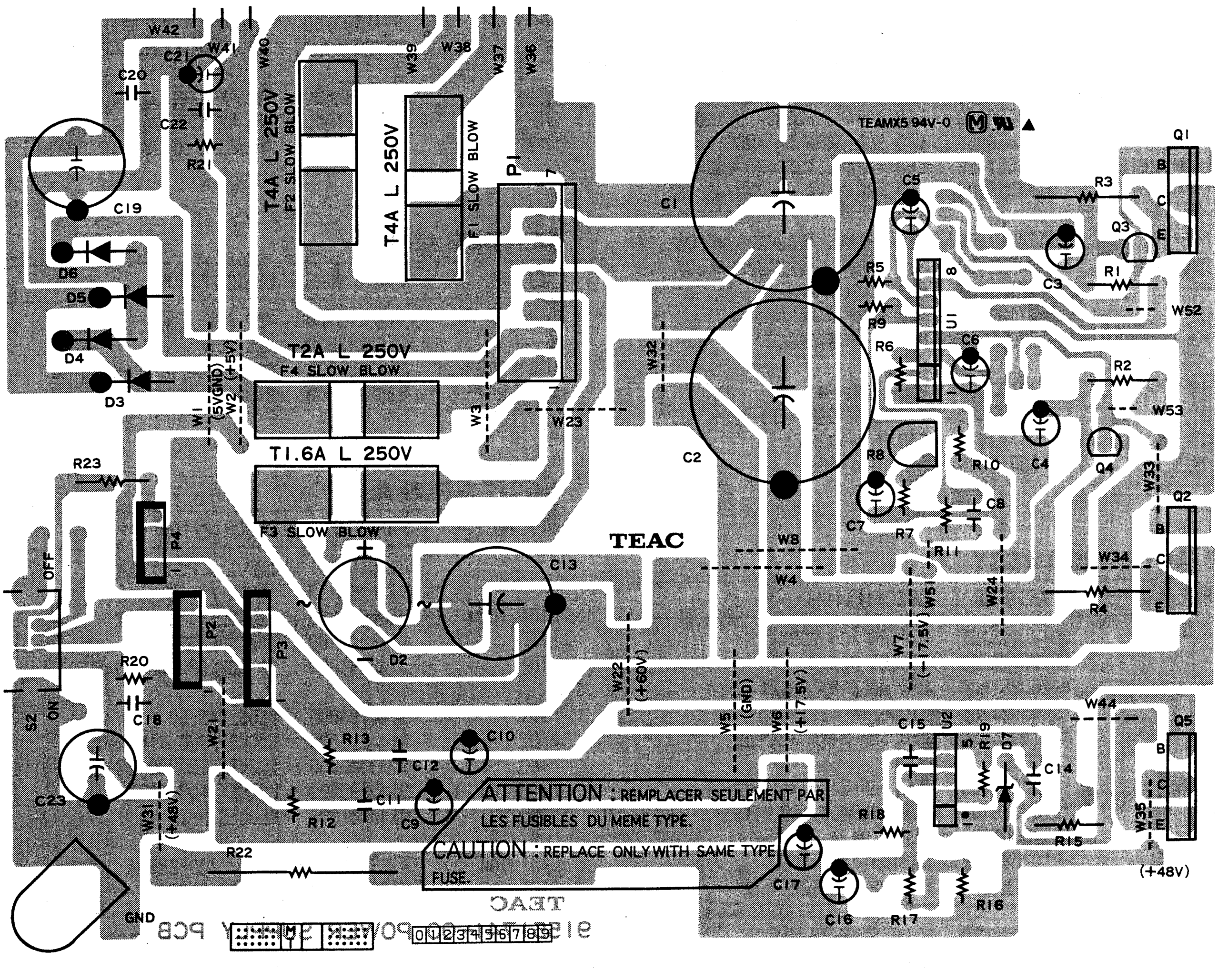
MIC AMP PCB


MIC AMP PCB
R1
R2
R3
R4
C1
C2
D1
D3
Q1
Q2
Q3
Q4
Q5
Q6
W1
W2
W4
R13
R17
R18
R19
TEAMX5 94V-0
TEAC
P1
P2

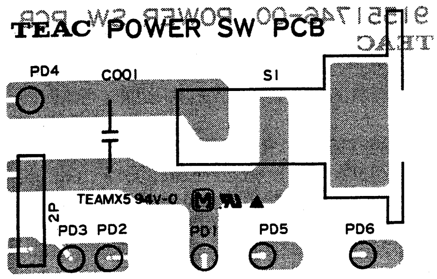
H.PHONE PCB


H.PHONE
TEAMX5 94V-0
TEAC
P3

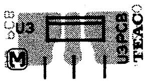
POWER SUPPLY PCB


W42
W41
W40
W39
W38
W37
W36
C21
C20
C22
R21
C19
D6
D5
D4
D3
T4A L 250V
F2 SLOW BLOW
T4A L 250V
F1 SLOW BLOW
P1
TEAMX5 94V-0
C1
C5
R3
Q1
B
C
E
Q3
C3
R1
W52
R5
R9
U1
C6
R6
R2
W53
C4
Q4
R8
R10
C8
C7
R7
R11
Q2
W34
R4
W33
T2A L 250V
F4 SLOW BLOW
W1 (5V GND)
W2 (+5V)
W3
W23
W32
C2
T1.6A L 250V
F3 SLOW BLOW
R23
P4
OFF
ON
S2
P2
P3
D2
C13
TEAC
W8
W4
W51
W7 (−17.5V)
W24
R20
C18
C23
W21
W31 (+48V)
W22 (+60V)
W5 (GND)
W6 (+17.5V)
R13
C12
C10
R12
C11
C9
ATTENTION : REMPLACER SEULEMENT PAR LES FUSIBLES DU MEME TYPE.
CAUTION : REPLACE ONLY WITH SAME TYPE FUSE.
C15
U2
R19
D7
C14
W44
Q5
R18
R15
W35
(+48V)
C17
C16
R17
R16
R22
GND
0 1 2 3 4 5 6 7 8 9

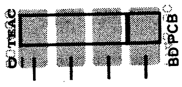
POWER SW PCB


TEAC POWER SW PCB
PD4
C001
S1
2P
TEAMX5 94V-0
PD3
PD2
PD1
PD5
PD6

U3 PCB


U3
U3PCB
TEAC

BD PCB



METER PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145172101	METER PCB ASSY
	*9155172100	METER PCB
	*9260249100	LED SUPPORT-4
D1	9174015800	LED, SLR-34VR 3F(RED)
D2	9165022150	DIODE, TP 1SS133T
D3, 4	9174015800	LED, SLR-34VR 3F(RED)
D5, 6	9174020100	LED ARRAY, LA223CZ/5Y7ED02
D7	9174015900	LED, SLR-34DU 3F(AMBER)
D101, 201	9174021100	LED ARRAY, LA223CZ/3Y4ED03
D301, 401	9174021100	LED ARRAY, LA223CZ/3Y4ED03
D501, 601	9174021100	LED ARRAY, LA223CZ/3Y4ED03
D701, 801	9174021100	LED ARRAY, LA223CZ/3Y4ED03
P1	9107089400	METER 4P WIRES
P2	9107089200	METER 2P WIRES
P3	9107089500	METER 8P WIRES
P4	9144193000	PLUG, S4B-EH
Q1	9163309420	TR, 2SC1815GR (TP)
Q2, 3	9163313420	DTR, DTC-143ES
Q4, 5	9163013320	DTR, DTA115ES

MASTER PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145173101	MASTER PCB ASSY
	*9155173100	MASTER PCB
	*9260251500	LED HOLDER, LED-21
D1	9165022150	DIODE, TP 1SS133T
D001	9174015800	LED, SLR-34VR 3F(RED)
D009	9174015800	LED, SLR-34VR 3F(RED)
J1	9107088700	BUSS SHEILD 16P WERES
K1	9138001900	RELAY, NA-4. 5W-K
P1	9107089300	MASTER 3P WIRES
P2	9143191000	PLUG, S2B-EH-2P
P4	9144330000	PLUG, S16B-PH-K-S
P5, 11	9143197000	PLUG, S8B-EH-A
P6	9107089700	MASTER BUSS 12P WIRES
P7	9107089600	MASTER 10P WIRES
P8	9143192000	PLUG, S12B-PH-K-S
P9	9143278000	PLUG, 10P (S10B-PH-K)
P10	9144329000	CN60, RF-H302TD-1130
P12	9107089000	PS 6P WIRES
P13, 14	9144327000	CONNECTOR, TKC-A10P-D1
P15	9144327000	CONNECTOR, TKC-A10P-D1
Q1, 2	9163309420	TR, 2SC1815GR (TP)
Q3-14	9163310420	DTR, DTC 124ES TP
R70, 71	⚠ 9111812000	R, NONFLAMMABLE R-25 10
SW1-11	9135037300	SW, PS009-PA022BAT-PA 5.5
SW13, 19	9135037300	SW, PS009-PA022BAT-PA 5.5
SW21-27	9135037300	SW, PS009-PA022BAT-PA 5.5
SW29-35	9135037300	SW, PS009-PA022BAT-PA 5.5
SW37-61	9135037300	SW, PS009-PA022BAT-PA 5.5
U1-6	9167017300	IC, NJM4565LD (8P)
U7, 8	9167033800	IC, M5218L

MASTER PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
U9-18	9167017300	IC, NJM4565LD (8P)
U19, 20	9167009800	IC, TC4066BP (14P)
VR1, 2	9172031700	10KAX2VR EVJY 15F 03A14
VR11, 12	9172031700	10KAX2VR EVJY 15F 03A14
VR3, 4	9172031700	10KAX2VR EVJY 15F 03A14
VR5, 6	9172031600	VREVUF2LFL 3A 14 (10KA)
VR7, 8	9172031600	VREVUF2LFL 3A 14 (10KA)
VR9, 10	9172031700	10KAX2VR EVJY 15F 03A14

XLR PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145172300	XLR PCB ASSY
	*9155172300	XLR PCB
J901-908	9143981000	CONNECTOR, NC3FAH-0
P901-904	9107089100	HARNESS ASSY, MIC

INPUT A PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145169101	INPUT A PCB ASSY
	*9155169100	INPUT A PCB
D101, 102	9165022150	DIODE, TP 1SS133T
D103	9174020900	LED, SPR-39MVWF
J101	9144055000	Z JACK, CPH-066-045
P101	9144193000	PLUG, S4B-EH
P102	9144010000	SOCKET, TUC-P16X-B1
P103	9143340000	SOCKET, IL-SDD-3S-S2L2
P104, 105	9143996000	SOCKET, TUC-P11X-B1
P106	9143331000	PLUG, S3B-EH
Q101-104	9163310620	TR, TP 2SC-2878A
Q105, 106	9163013320	DTR, DTA115ES
Q107	9163313420	DTR, DTC-143ES
Q108	9163309420	TR, 2SC1815GR (TP)
R101, 102	⚠ 9114031060	R, NONFLAMMABLE 1/4W 22
R173	⚠ 9114040060	R, NONFLAMMABLE R-25 FF 47
SW101	9135034100	SW, PUSH SPUJ20 2-2
SW102	9135033700	SW, PUSH SPUJ12 4-2
SW103, 105	9135033800	SW, PUSH SPUJ20 2-4
SW104	9135033600	SW, PUSH SPUJ12 2-2
SW106	9135034000	SW, SPUJ 2X5
U101	9167014010	IC, UPC4570HA (8P)
U102-104	9167017300	IC, NJM4565LD (8P)
VR101	9172030900	R-VR, EVUE2AF3024D 20K(RD)
VR102, 105	9172031000	R-VR, EVUE3AF30B54 50KB CC
VR103	9172022100	VR, RK11K12M0437-200KCX2
VR104	9172031100	R-VR, EVUE3AF30B14 10KB CC
VR106	9172023500	VR, RK11K112A251-20KB
VR107-110	9172031400	R-VR, EVUE0AF30D54 50K(RD)
VR111	9172031400	R-VR, EVUE0AF30D54 50K(RD)
VR112	9172022500	VR, RK14K122A053-10KAC
VR113	9172031300	VR, SLIDE RSAON 11B9 10KRD

INPUT B PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145169201	INPUT B PCB ASSY
	*9155169100	INPUT A PCB
D101, 102	9165022150	DIODE, TP 1SS133T
D103	9174020900	LED, SPR-39MVWF
J101	9144055000	Z JACK, CPH-066-045
P1	9111274000	R, ARRAY 4R2W1X 2.4K
P101	9144193000	PLUG, S4B-EH
P102	9144010000	SOCKET, TUC-P16X-B1
P103	9143340000	SOCKET, IL-SDD-3S-S2L2
P104, 105	9143996000	SOCKET, TUC-P11X-B1
Q101-104	9163310620	TR, TP 2SC-2878A
Q105, 106	9163013320	DTR, DTA115ES
Q107	9163313420	DTR, DTC-143ES
Q108	9163309420	TR, 2SC1815GR (TP)
R101, 102	⚠ 9114031060	R, NONFLAMMABLE 1/4W 22
SW101	9135034100	SW, PUSH SPUJ20 2-2
SW102	9135033700	SW, PUSH SPUJ12 4-2
SW103, 105	9135033800	SW, PUSH SPUJ20 2-4
SW104	9135033600	SW, PUSH SPUJ12 2-2
SW106	9135034000	SW, PUSH SPUJ 2X5
U101	9167014010	IC, UPC4570HA (8P)
U102-104	9167017300	IC, NJM4565LD (8P)
VR101	9172030900	R-VR, EVUE2AF3024D 20K(RD)
VR102, 105	9172031000	R-VR, EVUE3AF30B54 50KB CC
VR103	9172022100	VR, RK11K12M0437-200KCX2
VR104	9172031100	R-VR, EVUE3AF30B14 10KB CC
VR106	9172023500	VR, RK11K112A251-20KB
VR107-111	9172031400	R-VR, EVUE0AF30D54 50K(RD)
VR112	9172022500	VR, RK14K122A053-10KAC
VR113	9172031300	VR, SLIDE RSAON 11B9 10KRD

JACK I/O PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145173200	JACK I/O PCB ASSY
	*9155173200	JACK I/O PCB
J1-28	9144272000	PHONE JACK, JY6353-14-1600
P1	9107088800	FLAT 60P WIRES
P2	9143176000	PLUG, 8P (B8B-EH-K)
P004	9143331000	PLUG, S3B-EH
R26, 25	⚠ 9111812000	R, NONFLAMMABLE R-25 10
RA1-4	9111275000	R, ARRAY RMNE4F 1502/7501
RA5-8	9111254000	R, ARRAY RMNZ8837
SW1, 2	9135037400	SW, SLIDE SSSU022-S09N1
U1-4	9167025200	IC, BA15532N
U5, 6	9167017300	IC, NJM4565LD (8P)

FADER PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145172201	FADER PCB ASSY
	*9155172200	FADER PCB
P1, 2	9144328000	CONNECTOR, TKC-A10X-A1
P3	9144328000	CONNECTOR, TKC-A10X-A1
U1-8	9167017300	IC, NJM4565LD
VR001, 002	9172027800	VR, SLIDE 10K (D)
VR003, 004	9172027800	VR, SLIDE 10K (D)
VR005, 006	9172027800	VR, SLIDE 10K (D)
VR007, 008	9172027800	VR, SLIDE 10K (D)
VR109	9172031500	VR, SLIDER SAON1219 10KDX2

BUSS (A1) PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145170200	BUSS (A1) PCB ASSY
	*9155170200	BUSS (A1) PCB
P201-208	9144045000	PLUG, TUC-P16P-B1
P209, 210	9107088500	BUSS (A) 8P WIRES
P211, 212	9144049000	PLUG, TUC-P20P-B1
P213, 214	9143176000	PLUG, 8P (B8B-EH-K)
SW201	9135032501	SW, SSSF122NA3-TK

BUSS (A2) PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145171101	BUSS (A2) PCB ASSY
	*9155171100	BUSS (A2) PCB
P201-208	9144045000	PLUG, TUC-P16P-B1
P209	9143197010	PLUG, S8B-EH-K
P210	9143197000	PLUG, S8B-EH-A
P211, 212	9144049000	PLUG, TUC-P20P-B1
P213, 214	9143176000	PLUG, 8P (B8B-EH-K)
SW201	9135032501	SW, SSSF122NA3-TK

BUSS (B1) PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145170300	BUSS (B1) PCB ASSY
	*9155170300	BUSS (B1) PCB
	*9107088900	GND WIRE
P221-230	9144040000	PLUG, TUC-P11P-B1
P233-236	9144040000	PLUG, TUC-P11P-B1
P237, 238	9144325000	CONNECTOR SOCKET, 12R-FJ
P239, 240	9144326000	CONNECTOR SOCKET, 12R-FL

BUSS (B2) PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145171201	BUSS (B2) PCB ASSY
	*9155171200	BUSS (B2) PCB
P221-236	9144040000	PLUG, TUC-P11P-B1
P237, 238	9144325000	CONNECTOR SOCKET, 12R-FJ
P239	9143192000	PLUG, S12B-PH-K-S
P240	9143192020	PLUG, S12B-PH-K-S (RZD)

DSUB PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145170100	DSUB PCB ASSY
	*9155170100	DSUB PCB
J201	9144276000	D-SUB 25P CONN., DMR-25S
P215	9144050000	SOCKET, TUC-P20X-B1

MIC AMP PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145168100	MIC AMP PCB ASSY
	*9155168100	MIC AMP PCB
D1-4	9165022150	DIODE, TP 1SS133T
P1	9144324000	CONNECTOR, TIX-P06P-B1
P2	9144323000	CONNECTOR, TIX-P05P-B1
Q1, 2	9163203020	TR, 2SB737S
Q3, 4	9163450520	TR, 2SC2603F
Q5, 6	9163009920	TR, 2SA1015GR

H.PHONE PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145174300	H. PHONE PCB ASSY
	*9155174300	H. PHONE PCB
J1	9143385010	CPJ-066-005
P5	9143331000	PLUG, S3B-EH

POWER SUPPLY PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145174101	POWER SUPPLY PCB ASSY [J, US]
	*9145174111	POWER SUPPLY PCB ASSY [E, UK]
	*9155174100	POWER SUPPLY PCB
	*9229021000	EARTH PLATE, A
	*9290001000	UL SI1ION (3X8)
C1, 2	⚠ 9117304600	C, ELEC 10000UF/35V
C3, 4	⚠ 9117140020	C, ELEC TP 10M 35V
C5, 6	⚠ 9117036021	C, ELEC 0. 47UF/50V (TP)
C13	⚠ 9117303700	C, ELEC 470UF 100V
C14	⚠ 9115819320	C, CERAMIC 0. 022UF/100VK YB
C19	⚠ 9117302000	C, ELEC 3300M 16V
C20	⚠ 9115831120	C, CERAMIC 0. 022UF 25VK FF
D2	⚠ 9165021500	BRIDGE RECTIFIER, PB153M
D3-6	⚠ 9165020560	D, 1N4003 TP
D7	⚠ 9166040651	ZENER DIODE, RD3. 6EL2

POWER SUPPLY PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
F1, 2	⚠ 9150036000	T-LAG FUSE, 4A 250V T [J, US]
	⚠ 9150047000	T-LAG FUSE, 4A 250V T [E, UK]
F3	⚠ 9150028000	T-LAG FUSE, 1. 6A 250V T [E, UK]
	⚠ 9150037000	T-LAG FUSE, 1. 6A 250V T [J, US]
F4	⚠ 9150029000	T-LAG FUSE, 2A 250V [E, UK]
	⚠ 9150048000	T-LAG FUSE, 2A 250V [J, US]
J2	9107088600	PS 8P WIRES
P1	9143398000	CONNECTOR, 5273-07A
P2	9143173000	CONNECTOR PLUG, 5P
P3	9143174000	CONNECTOR PLUG, 6P
P4	9143172000	CONNECTOR PLUG, B4B-EH-A
Q1	⚠ 9163015100	TR, 2SB754-0
Q2	⚠ 9163015200	TR, 2SD844-0
Q3	⚠ 9163011620	TR, TP 2SA1020Y
Q4	⚠ 9163310200	TR, 2SC2655Y
Q5	⚠ 9163015400	TR, 2SB922R
R1, 2	⚠ 9114427000	R, NONFLAMMABLE R-25 FF 82
R3, 4	⚠ 9114428000	R, METAL OXIDE 2W FF 0. 27
R8	9112056010	SEMI-FIXED VR, 4. 7K TB067A
R15	⚠ 9114430000	R, NONFLAMMABLE R-25 FF330
R22	⚠ 9114417010	R, NONFLAMMABLE 4W 10 OHM
S2	9135032501	SW, SSSF122NA3-TK
U1	⚠ 9167022400	IC, M5230LA
U2	⚠ 9167026000	IC, M5231TL

POWER SW PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	*9145174601	POWER SW PCB ASSY [J, US]
	*9145174611	POWER SW PCB ASSY [E, UK]
	*9155174600	POWER SW PCB
	5730007500	COVER, CONDENSOR [E, UK]
C001	⚠ 9120000500	SPARK KILLER, 0. 0047U/250V
S1	⚠ 9135037200	POWER SW, SFDLB11M7U TK
2P	9144177000	TERMINAL LAPPING, 2P [E, UK]

U3 PCB ASSY

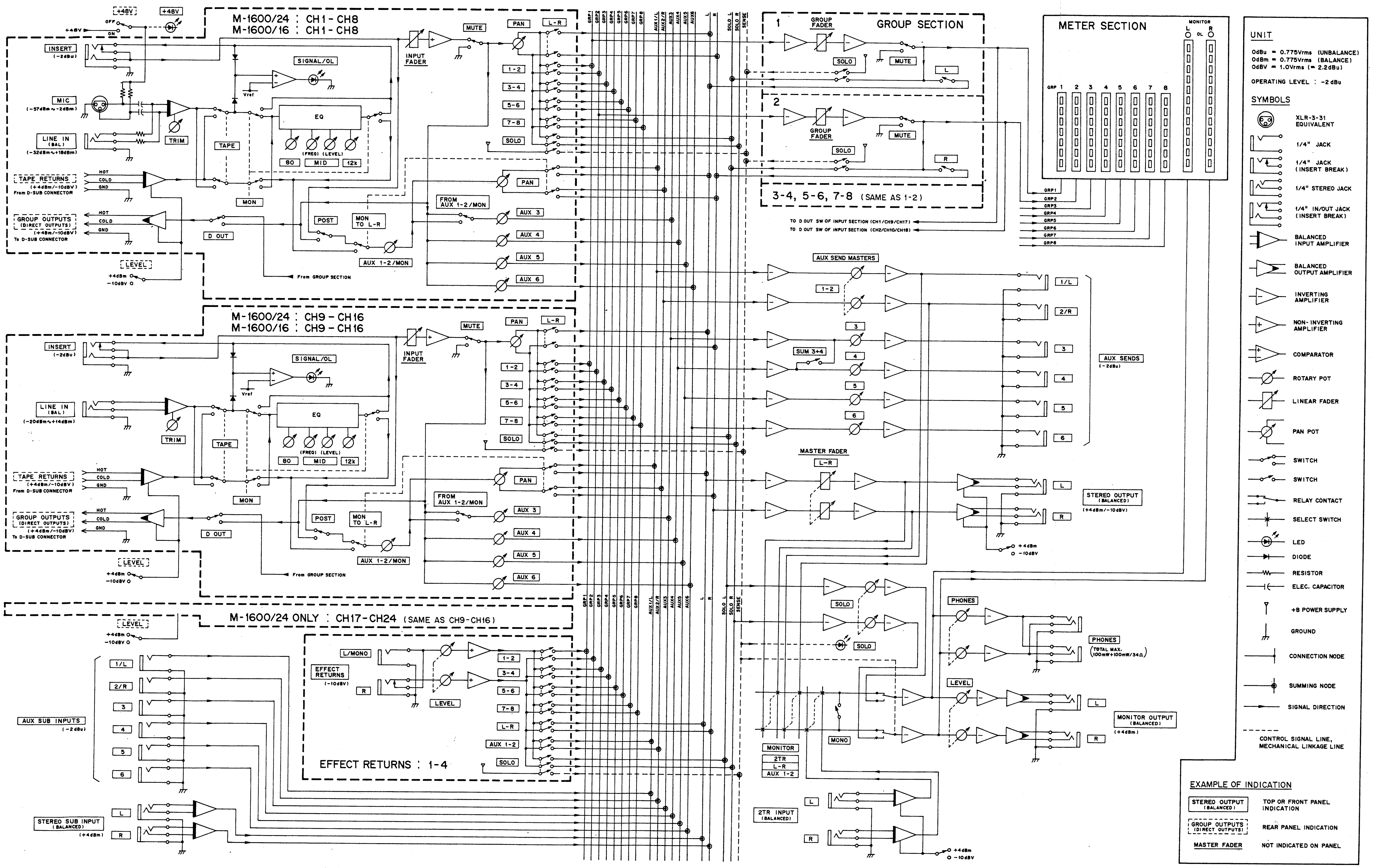
REF. NO.	PARTS NO.	DESCRIPTION
	*9145174201	U3 PCB ASSY
	*9155174200	U3 PCB
	*9290001000	UL SI1ION (3X8)
U3	⚠ 9167014800	IC, NJM7805FA (3P)

BD PCB ASSY

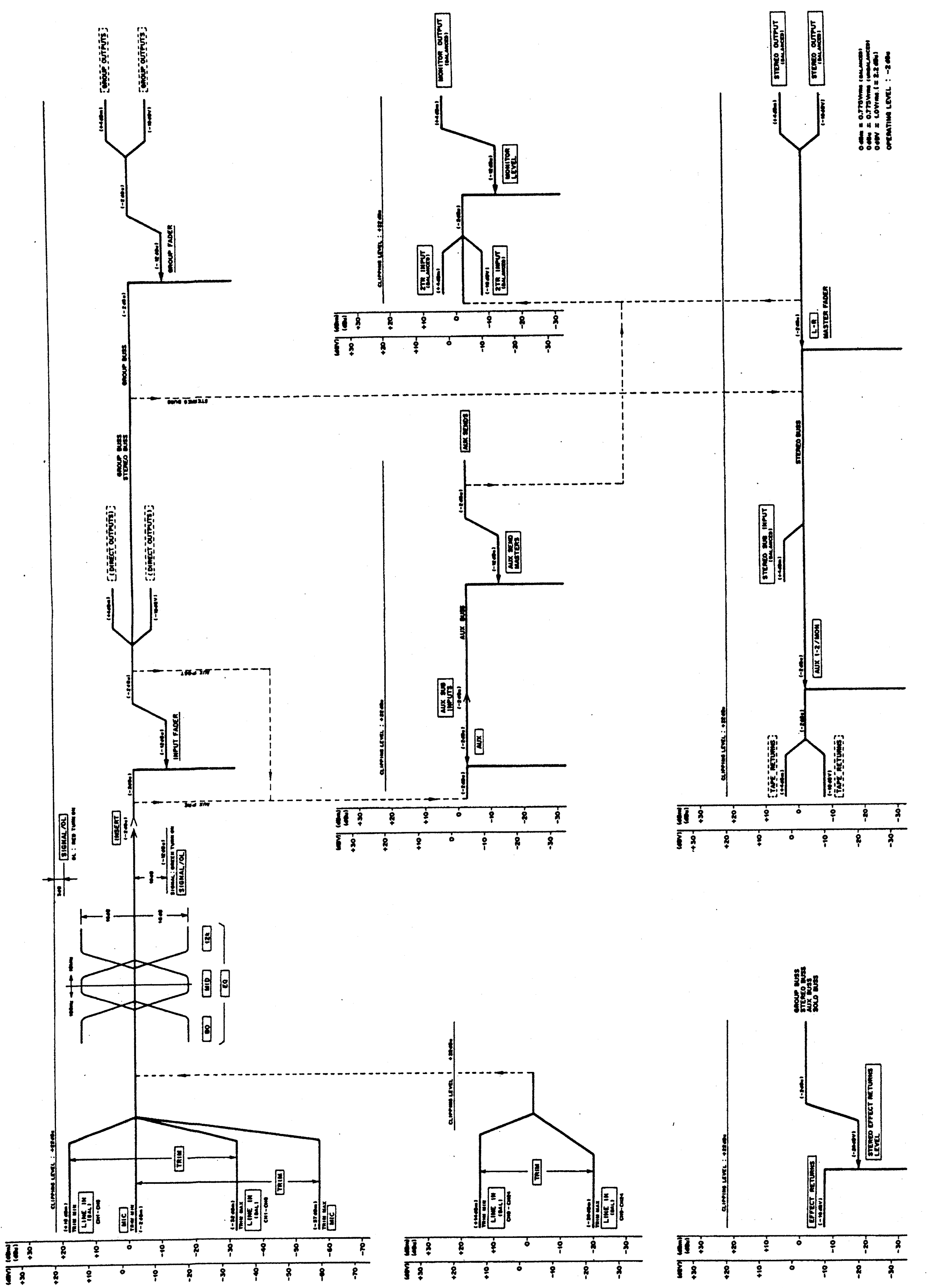
REF. NO.	PARTS NO.	DESCRIPTION
	*9145174501	BD PCB ASSY
	*9155174500	BD PCB
	*9290001100	UL SI1ION C03X11
D1	⚠ 9165023800	BRIDGE, PBU-603

5. BLOCK DIAGRAM

ブロック・ダイアグラム


[+48V]
+48V
OFF
ON
+48V
M-1600/24 : CH1 - CH8
M-1600/16 : CH1 - CH8
INSERT
(-2dBu)
MIC
(-57dBm～-2dBm)
LINE IN
(BAL)
(-32dBm～+18dBm)
TRIM
TAPE RETURNS
(+4dBm/-10dBV)
From D-SUB CONNECTOR
HOT
COLD
GND
GROUP OUTPUTS
(DIRECT OUTPUTS)
(+4dBm/-10dBV)
To D-SUB CONNECTOR
LEVEL
+4dBm
-10dBV
SIGNAL/OL
Vref
EQ
(FREQ) (LEVEL)
80
MID
12k
TAPE
MON
POST
MON TO L-R
D OUT
AUX 1-2/MON
From GROUP SECTION
INPUT FADER
MUTE
PAN
L-R
1-2
3-4
5-6
7-8
SOLO
FROM AUX 1-2/MON
AUX 3
AUX 4
AUX 5
AUX 6
M-1600/24 : CH9 - CH16
M-1600/16 : CH9 - CH16
(-20dBm～+14dBm)
M-1600/24 ONLY : CH17-CH24 (SAME AS CH9-CH16)
GRP1
GRP2
GRP3
GRP4
GRP5
GRP6
GRP7
GRP8
AUX1/L
AUX2/R
AUX3
AUX4
AUX5
AUX6
L
R
SOLO L
SOLO R
SENSE
GROUP SECTION
1
GROUP FADER
MUTE
SOLO
2
3-4, 5-6, 7-8 (SAME AS 1-2)
TO D OUT SW OF INPUT SECTION (CH1/CH9/CH17)
TO D OUT SW OF INPUT SECTION (CH2/CH10/CH18)
METER SECTION
MONITOR
L OL R
GRP 1 2 3 4 5 6 7 8
AUX SEND MASTERS
1-2
3
SUM 3+4
4
5
6
1/L
2/R
AUX SENDS
(-2dBu)
MASTER FADER
L-R
STEREO OUTPUT
(BALANCED)
(+4dBm/-10dBV)
PHONES
PHONES
(TOTAL MAX. 100mW+100mW/34Ω)
LEVEL
MONITOR OUTPUT
(BALANCED)
(+4dBm)
MONO
MONITOR
2TR
L-R
AUX 1-2
2TR INPUT
(BALANCED)
AUX SUB INPUTS
(-2dBu)
STEREO SUB INPUT
(BALANCED)
(+4dBm)
L/MONO
EFFECT RETURNS
(-10dBV)
AUX 1-2
EFFECT RETURNS : 1-4
UNIT
0dBu = 0.775Vrms (UNBALANCE)
0dBm = 0.775Vrms (BALANCE)
0dBV = 1.0Vrms (= 2.2dBu)
OPERATING LEVEL : -2 dBu
SYMBOLS
XLR-3-31 EQUIVALENT
1/4" JACK
1/4" JACK (INSERT BREAK)
1/4" STEREO JACK
1/4" IN/OUT JACK (INSERT BREAK)
BALANCED INPUT AMPLIFIER
BALANCED OUTPUT AMPLIFIER
INVERTING AMPLIFIER
NON-INVERTING AMPLIFIER
COMPARATOR
ROTARY POT
LINEAR FADER
PAN POT
SWITCH
SWITCH
RELAY CONTACT
SELECT SWITCH
LED
DIODE
RESISTOR
ELEC. CAPACITOR
+B POWER SUPPLY
GROUND
CONNECTION NODE
SUMMING NODE
SIGNAL DIRECTION
CONTROL SIGNAL LINE, MECHANICAL LINKAGE LINE
EXAMPLE OF INDICATION
STEREO OUTPUT (BALANCED) — TOP OR FRONT PANEL INDICATION
GROUP OUTPUTS (DIRECT OUTPUTS) — REAR PANEL INDICATION
MASTER FADER — NOT INDICATED ON PANEL

6. LEVEL DIAGRAM
レベル・ダイアグラム


GROUP OUTPUTS
GROUP FADER
GROUP BUSS
STEREO BUSS
DIRECT OUTPUTS
INPUT FADER
INSERT
SIGNAL/OL
EQ
HI
MID
LO
TRIM
MIC
LINE IN
MONITOR OUTPUT
MONITOR LEVEL
2TR INPUT
AUX SENDS
AUX SEND MASTERS
AUX BUSS
AUX SUB INPUTS
AUX
STEREO OUTPUT
MASTER FADER
L-R
STEREO SUB INPUT
AUX 1-2/MON
TAPE RETURNS
EFFECT RETURNS
STEREO EFFECT RETURNS LEVEL
CLIPPING LEVEL
dBV
dBm
+30
+20
+10
0
-10
-20
-30
-40
-50
-60
-70

M-1600

TASCAM
TEAC Professional Division

ティアック株式会社 タスカム部 ☎ (0422) 52-5072 〒180 東京都武蔵野市中町3－7－3

技術的なお問合わせ、ご相談 CE課営業技術係 ☎ (0422) 52-5106 〒180 東京都武蔵野市中町3－7－3

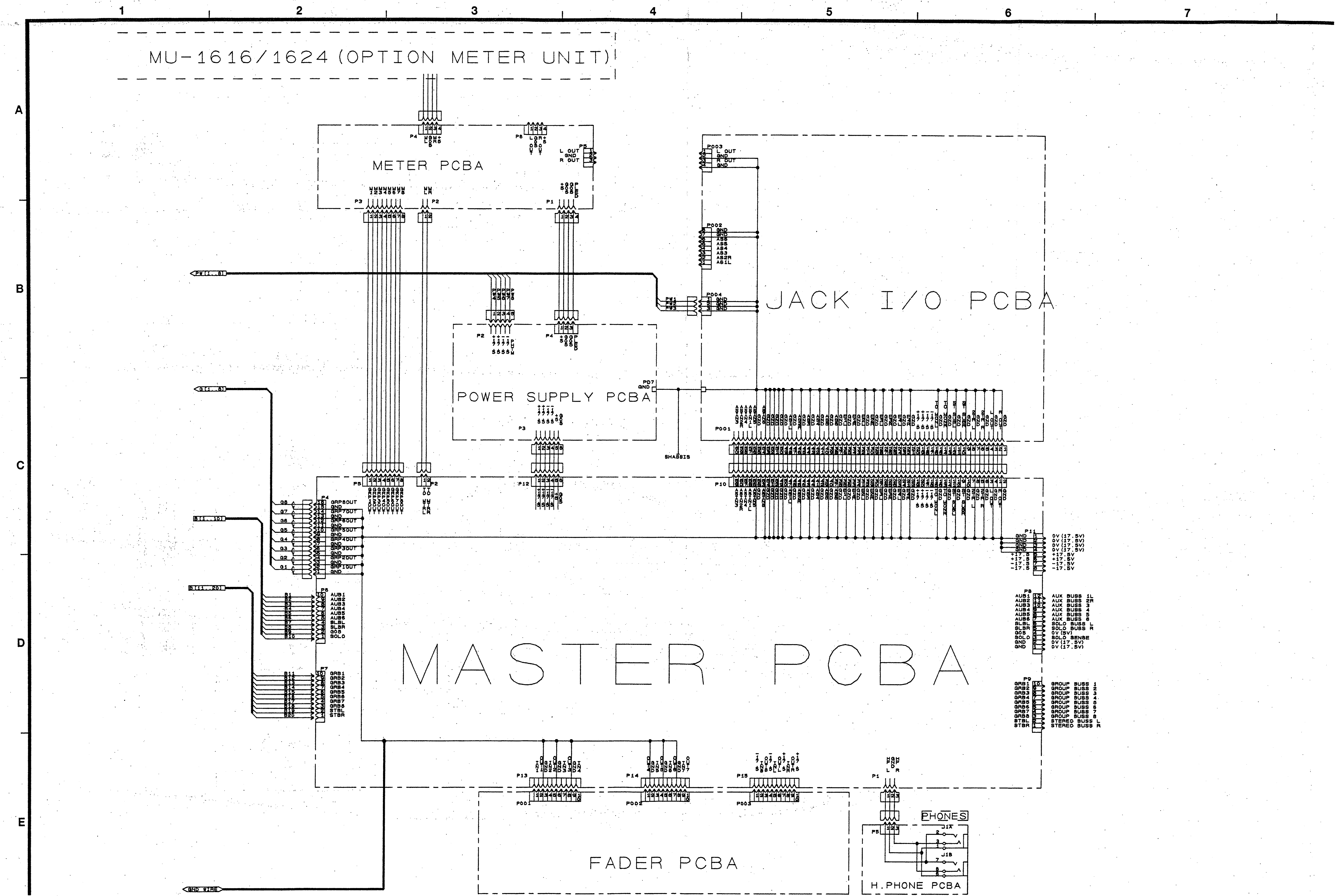
サービスに関するお問合わせは、最寄りの営業所等へご連絡ください．
営業所にはサービス・センターが併設されています．

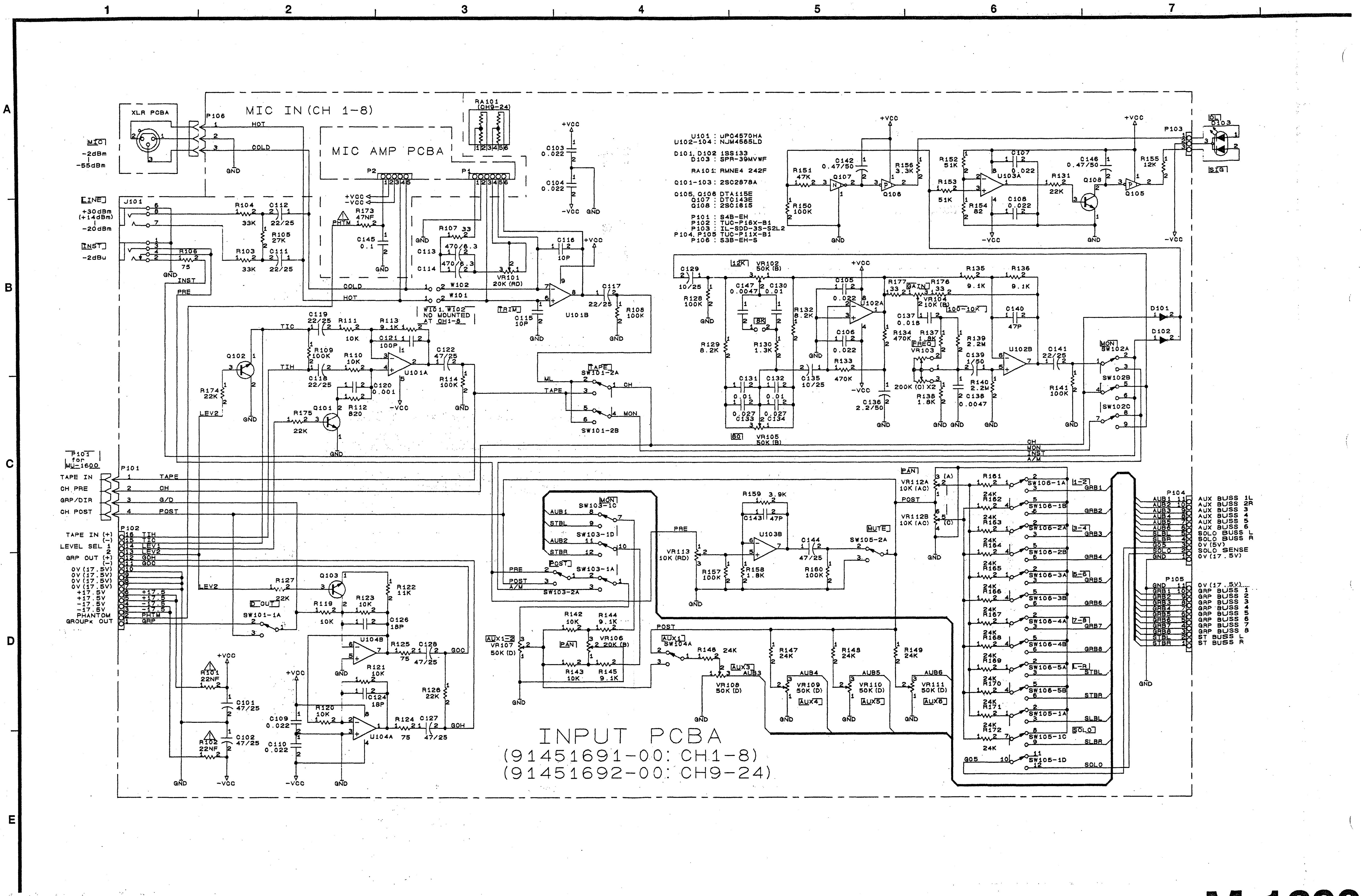
札幌営業所	☎ (011) 521-4101㈹	〒064 札幌市中央区南7条西2－2	くぼたビル
仙台営業所	☎ (022) 227-1501㈹	〒980 仙台市青葉区1番町2－5－5	中央ビル
新潟サービス	☎ (025) 245-0103	〒950 新潟県新潟市本馬越1－4－11	黒井ハイツ
大宮サービス	☎ (048) 642-4551	〒331 大宮市三橋2－846	
多摩サービス	☎ (0422) 52-5102	〒180 東京都武蔵野市中町3－7－3	
プロ機器サービス	☎ (0422) 52-5107	〒180 東京都武蔵野市中町3－7－3	
タスカム東京営業所	☎ (03) 3592-2051㈹	〒100 東京都千代田区永田町2－10－7	星ガ岡会館
千葉サービス	☎ (043) 255-1281	〒260 千葉市中央区椿森1－21－13	清水ビル
神奈川サービス	☎ (0427) 46-6850	〒228 相模原市上鶴間3553－1	グリーンシティビル
静岡サービス	☎ (054) 238-2431	〒422 静岡市高松1－12－1	寿道ハイツ105号
名古屋営業所	☎ (052) 702-3100㈹	〒465 名古屋市名東区上社5－406	
京都サービス	☎ (075) 871-8730	〒616 京都市右京区常盤窪町19	西垣ビル
大阪営業所	☎ (06) 384-5201㈹	〒564 吹田市垂水町3－34－10	
岡山サービス	☎ (0862) 25-8601	〒700 岡山市新保1142－6	
広島営業所	☎ (082) 294-4751㈹	〒730 広島市中区西川口町13－19	
福岡営業所	☎ (092) 431-5781㈹	〒812 福岡市博多区東光2－2－24	
福岡サービス	☎ (092) 936-5672	〒811-22 福岡県粕屋郡志免町志免1041	

TEAC CORPORATION	3-7-3, Nakacho, Musashino-shi, Tokyo 180, Japan	Phone:(0422)52-5081
TEAC AMERICA, INC.	7733 Telegraph Road, Montebello, California 90640	Phone:(213)726-0303
TEAC CANADA LTD.	340 Brunel Road, Mississauga, Ontario L4Z 2C2, Canada	Phone:905-890-8008
TEAC UK LIMITED	5 Marlin House, Marlins Meadow, The Croxley Centre, Watford, Herts. WD1 8YA, U.K.	Phone:01923-819699
TEAC DEUTSCHLAND GmbH	Bahnstrasse 12, 65205 Wiesbaden-Erbenheim, Germany	Phone:0611-71580
TEAC FRANCE S.A.	17, Rue Alexis-de-Tocqueville, CE 005 92182 Antony Cedex, France	Phone:(1)42.37.01.02
TEAC NEDERLAND BV	Perkinsbaan 11, 3439 ND Nieuwegein, Nederland	Phone:03-402-30229
TEAC AUSTRALIA PTY., LTD. A.C.N. 005 408 462	106 Bay Street, Port Melborne, Victoria 3207, Australia	Phone:(03)9644-2442
TEAC ITALIANA S.p.A.	Via C. Cantù 5, 20092 Cinisello Balsamo, Milano, Italy	Phone:02-66010500

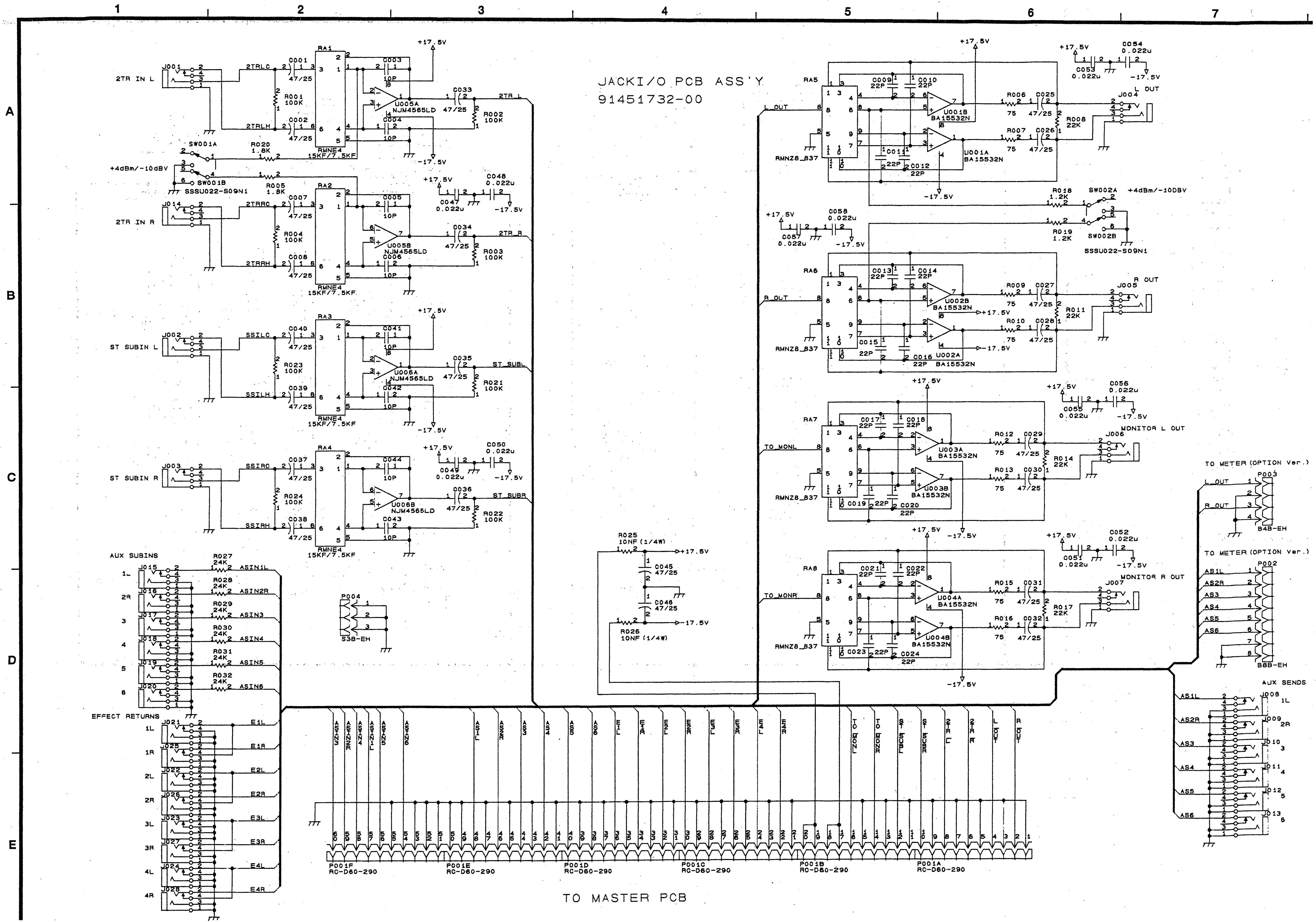
PRINTED IN JAPAN 0896U 0.4 M-1268A

SCHEMATIC DIAGRAM M-1600 WIRING (MASTER SECTION)

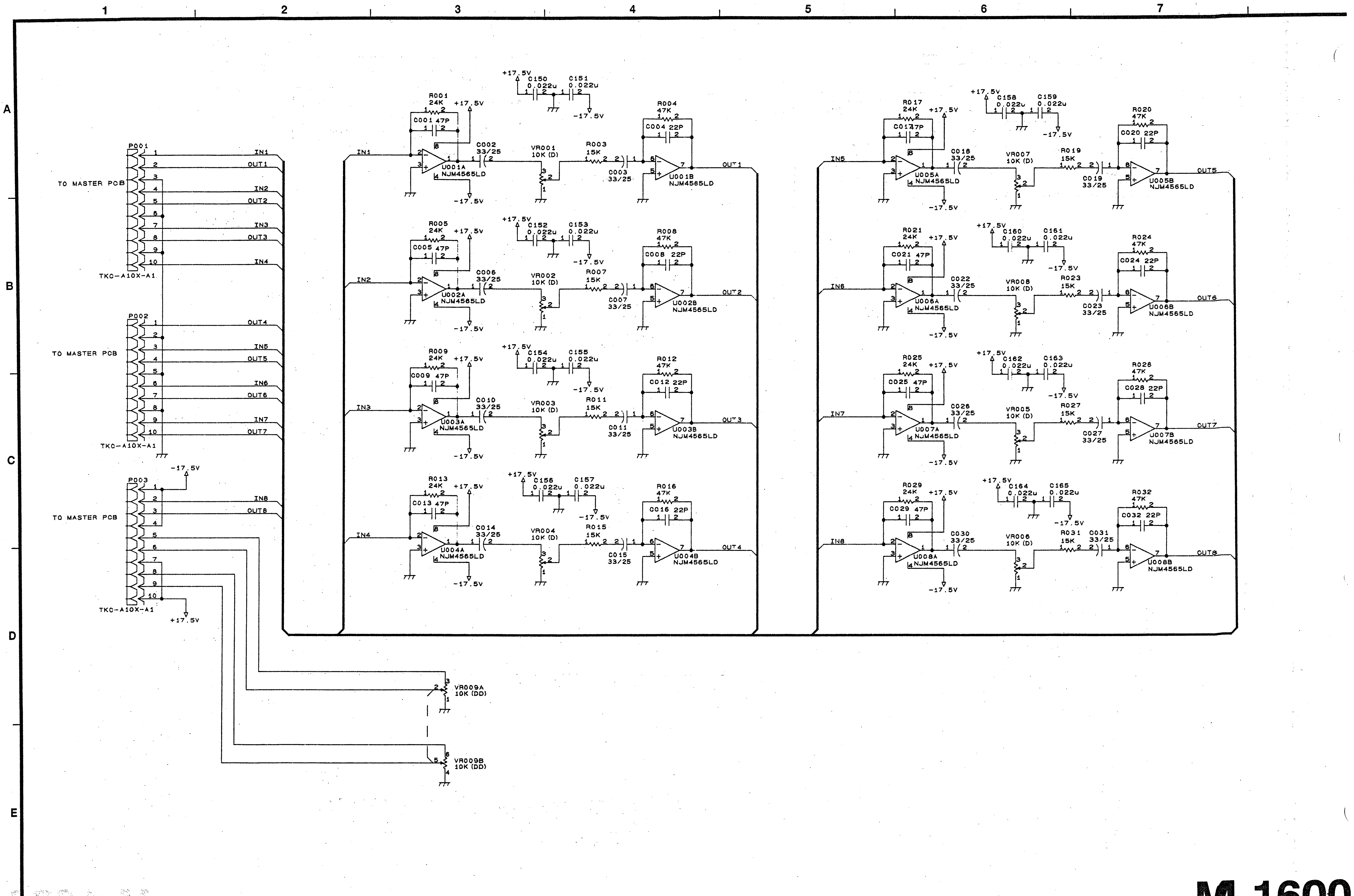

1
2
3
4
5
6
7
A
B
C
D
E
MU-1616/1624 (OPTION METER UNIT)
METER PCBA
P4
P5
P3
P2
P1
L OUT
GND
R OUT
JACK I/O PCBA
P003
L OUT
GND
R OUT
GND
P002
GND
GND
AS6
AS5
AS4
AS3
AS2R
AS1L
P004
GND
GND
GND
PW1
PW2
PW3
PW(1..8)
POWER SUPPLY PCBA
PD7
GND
CHASSIS
P001
G(1..8)
B(1..10)
B(11..20)
P4
G8
G7
G6
G5
G4
G3
G2
G1
GRP8OUT
GND
GRP7OUT
GND
GRP6OUT
GND
GRP5OUT
GND
GRP4OUT
GND
GRP3OUT
GND
GRP2OUT
GND
GRP1OUT
GND
P5
P2
P12
P10
P6
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
AUB1
AUB2
AUB3
AUB4
AUB5
AUB6
SLBL
SLBR
G05
SOLO
P7
B11
B12
B13
B14
B15
B16
B17
B18
B19
B20
GRB1
GRB2
GRB3
GRB4
GRB5
GRB6
GRB7
GRB8
STBL
STBR
MASTER PCBA
P11
GND 0V (17.5V)
GND 0V (17.5V)
GND 0V (17.5V)
GND 0V (17.5V)
+17.5 +17.5V
+17.5 +17.5V
-17.5 -17.5V
-17.5 -17.5V
P8
AUB1 AUX BUSS 1L
AUB2 AUX BUSS 2R
AUB3 AUX BUSS 3
AUB4 AUX BUSS 4
AUB5 AUX BUSS 5
AUB6 AUX BUSS 6
SLBL SOLO BUSS L
SLBR SOLO BUSS R
G05 0V (5V)
SOLO SOLO SENSE
GND 0V (17.5V)
GND 0V (17.5V)
P9
GRB1 GROUP BUSS 1
GRB2 GROUP BUSS 2
GRB3 GROUP BUSS 3
GRB4 GROUP BUSS 4
GRB5 GROUP BUSS 5
GRB6 GROUP BUSS 6
GRB7 GROUP BUSS 7
GRB8 GROUP BUSS 8
STBL STEREO BUSS L
STBR STEREO BUSS R
P13
P14
P15
P1
P001
P002
P003
FADER PCBA
PHONES
J1A
J1B
P5
H.PHONE PCBA
GND WIRE


1
2
3
4
5
6
7
A
B
C
D
E
MIC IN (CH 1-8)
XLR PCBA
MIC AMP PCBA
RA101 (CH9-24)
MIC -2dBm -55dBm
LINE +30dBm (+14dBm) -20dBm
INST -2dBu
U101 : uPC4570HA
U102-104 : NJM4565LD
D101, D102 1SS133
D103 : SPR-39MVWF
RA101: RMNE4 242F
Q101-103 : 2SC2878A
Q105, Q106 DTA115E
Q107 : DTC143E
Q108 : 2SC1815
P101 : S4B-EH
P102 : TUC-P16X-B1
P103 : IL-8DD-3S-S2L2
P104, P105 TUC-P11X-B1
P106 : S3B-EH-S
P101 for MU-1600
TAPE IN
CH PRE
GRP/DIR
CH POST
TAPE IN (+) (-)
LEVEL SEL 1 2
GRP OUT (+) (-)
0V (17.5V)
+17.5V
-17.5V
PHANTOM
GROUPx OUT
TRIM
TAPE
MON
POST
MUTE
PAN
FREQ
GAIN
OL
SIG
P104
AUX BUSS 1L
AUX BUSS 2R
AUX BUSS 3
AUX BUSS 4
AUX BUSS 5
AUX BUSS 6
SOLO BUSS L
SOLO BUSS R
0V (5V)
SOLO SENSE
0V (17.5V)
P105
GRP BUSS 1
GRP BUSS 2
GRP BUSS 3
GRP BUSS 4
GRP BUSS 5
GRP BUSS 6
GRP BUSS 7
GRP BUSS 8
ST BUSS L
ST BUSS R
INPUT PCBA
(91451691-00: CH1-8)
(91451692-00: CH9-24)

TASCAM TEAC Professional Division SCHEMATIC DIAGRAM **M-1600** JACK I/O PCB

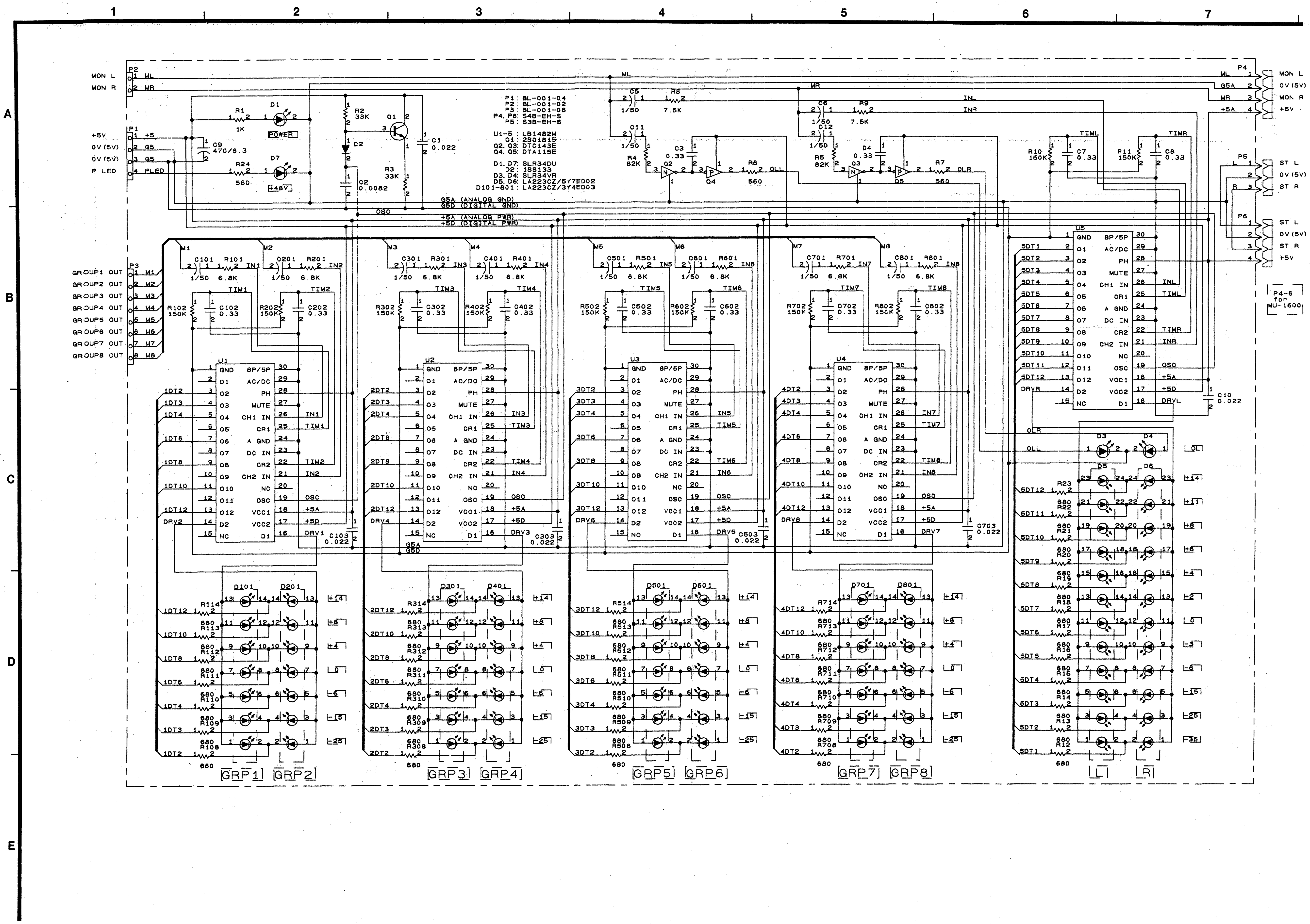

1
2
3
4
5
6
7
A
B
C
D
E
JACKI/O PCB ASS'Y
91451732-00
2TR IN L
2TR IN R
ST SUBIN L
ST SUBIN R
+4dBm/-10dBV
SW001A
SW001B
SSSU022-S09N1
RA1
RA2
RA3
RA4
RMNE4
15KF/7.5KF
U005A
U005B
U006A
U006B
NJM4565LD
+17.5V
-17.5V
2TR L
2TR R
ST SUBL
ST SUBR
AUX SUBINS
ASIN1L
ASIN2R
ASIN3
ASIN4
ASIN5
ASIN6
EFFECT RETURNS
E1L
E1R
E2L
E2R
E3L
E3R
E4L
E4R
P004
S3B-EH
R025
10NF (1/4W)
R026
10NF (1/4W)
C045
47/25
C046
47/25
RA5
RA6
RA7
RA8
RMNZ8_837
U001A
U001B
U002A
U002B
U003A
U003B
U004A
U004B
BA15532N
L OUT
R OUT
TO MONL
TO MONR
J004
J005
J006
J007
MONITOR L OUT
MONITOR R OUT
SW002A
SW002B
SSSU022-S09N1
TO METER (OPTION Ver.)
P003
B4B-EH
P002
B8B-EH
AS1L
AS2R
AS3
AS4
AS5
AS6
AUX SENDS
J008
J009
J010
J011
J012
J013
P001F
P001E
P001D
P001C
P001B
P001A
RC-D60-290
TO MASTER PCB

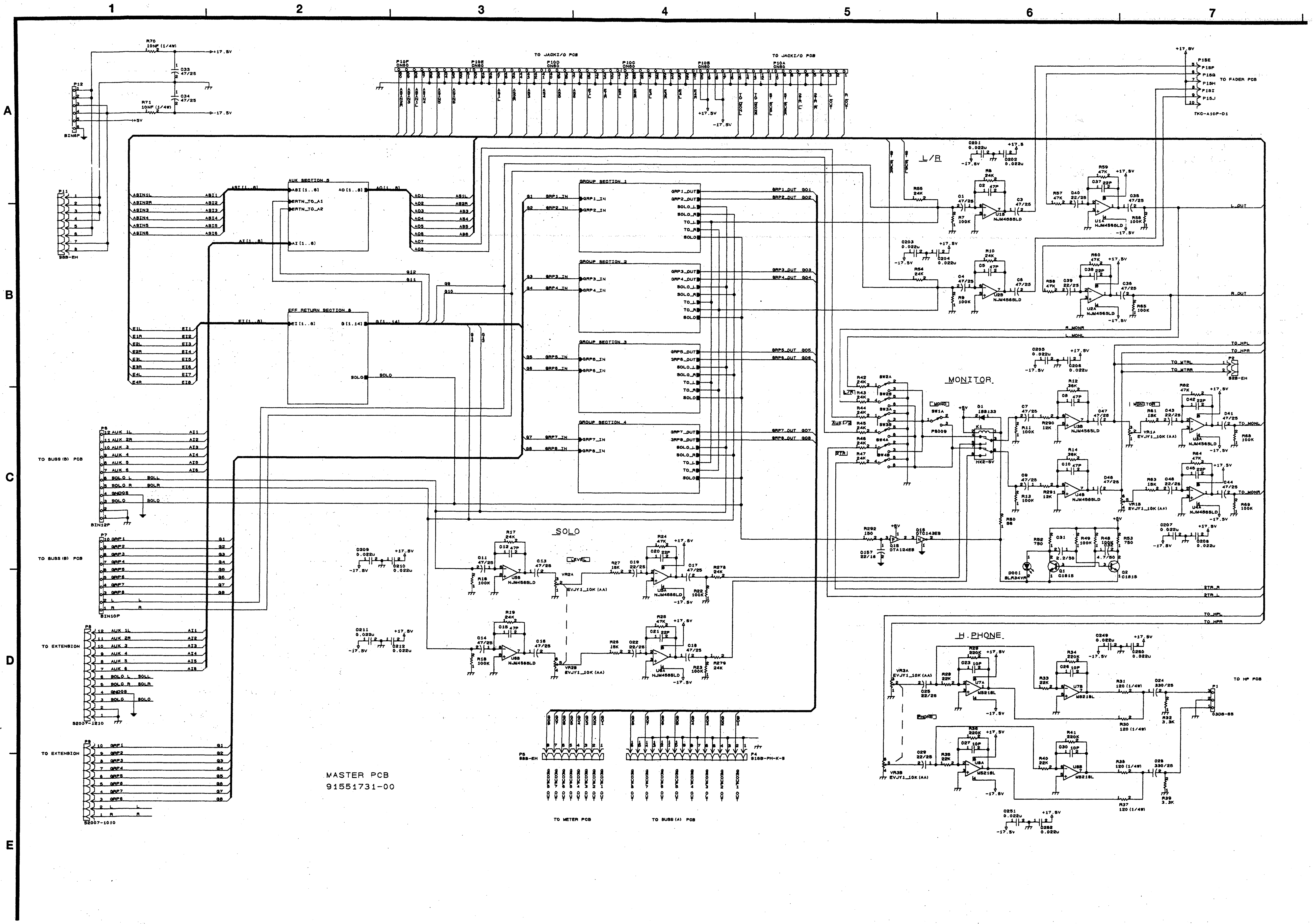
SCHEMATIC DIAGRAM M-1600 FADER PCB


1
2
3
4
5
6
7
A
B
C
D
E
TO MASTER PCB
P001
TKC-A10X-A1
IN1
OUT1
IN2
OUT2
IN3
OUT3
IN4
TO MASTER PCB
P002
TKC-A10X-A1
OUT4
IN5
OUT5
IN6
OUT6
IN7
OUT7
TO MASTER PCB
P003
TKC-A10X-A1
-17.5V
+17.5V
IN8
OUT8
R001 24K
C001 47P
+17.5V
-17.5V
C002 33/25
U001A NJM4565LD
C150 0.022u
C151 0.022u
VR001 10K (D)
R003 15K
C003 33/25
R004 47K
C004 22P
U001B NJM4565LD
R005 24K
C005 47P
C006 33/25
U002A NJM4565LD
C152 0.022u
C153 0.022u
VR002 10K (D)
R007 15K
C007 33/25
R008 47K
C008 22P
U002B NJM4565LD
R009 24K
C009 47P
C010 33/25
U003A NJM4565LD
C154 0.022u
C155 0.022u
VR003 10K (D)
R011 15K
C011 33/25
R012 47K
C012 22P
U003B NJM4565LD
R013 24K
C013 47P
C014 33/25
U004A NJM4565LD
C156 0.022u
C157 0.022u
VR004 10K (D)
R015 15K
C015 33/25
R016 47K
C016 22P
U004B NJM4565LD
R017 24K
C017 47P
C018 33/25
U005A NJM4565LD
C158 0.022u
C159 0.022u
VR007 10K (D)
R019 15K
C019 33/25
R020 47K
C020 22P
U005B NJM4565LD
R021 24K
C021 47P
C022 33/25
U006A NJM4565LD
C160 0.022u
C161 0.022u
VR008 10K (D)
R023 15K
C023 33/25
R024 47K
C024 22P
U006B NJM4565LD
R025 24K
C025 47P
C026 33/25
U007A NJM4565LD
C162 0.022u
C163 0.022u
VR005 10K (D)
R027 15K
C027 33/25
R028 47K
C028 22P
U007B NJM4565LD
R029 24K
C029 47P
C030 33/25
U008A NJM4565LD
C164 0.022u
C165 0.022u
VR006 10K (D)
R031 15K
C031 33/25
R032 47K
C032 22P
U008B NJM4565LD
VR009A 10K (DD)
VR009B 10K (DD)

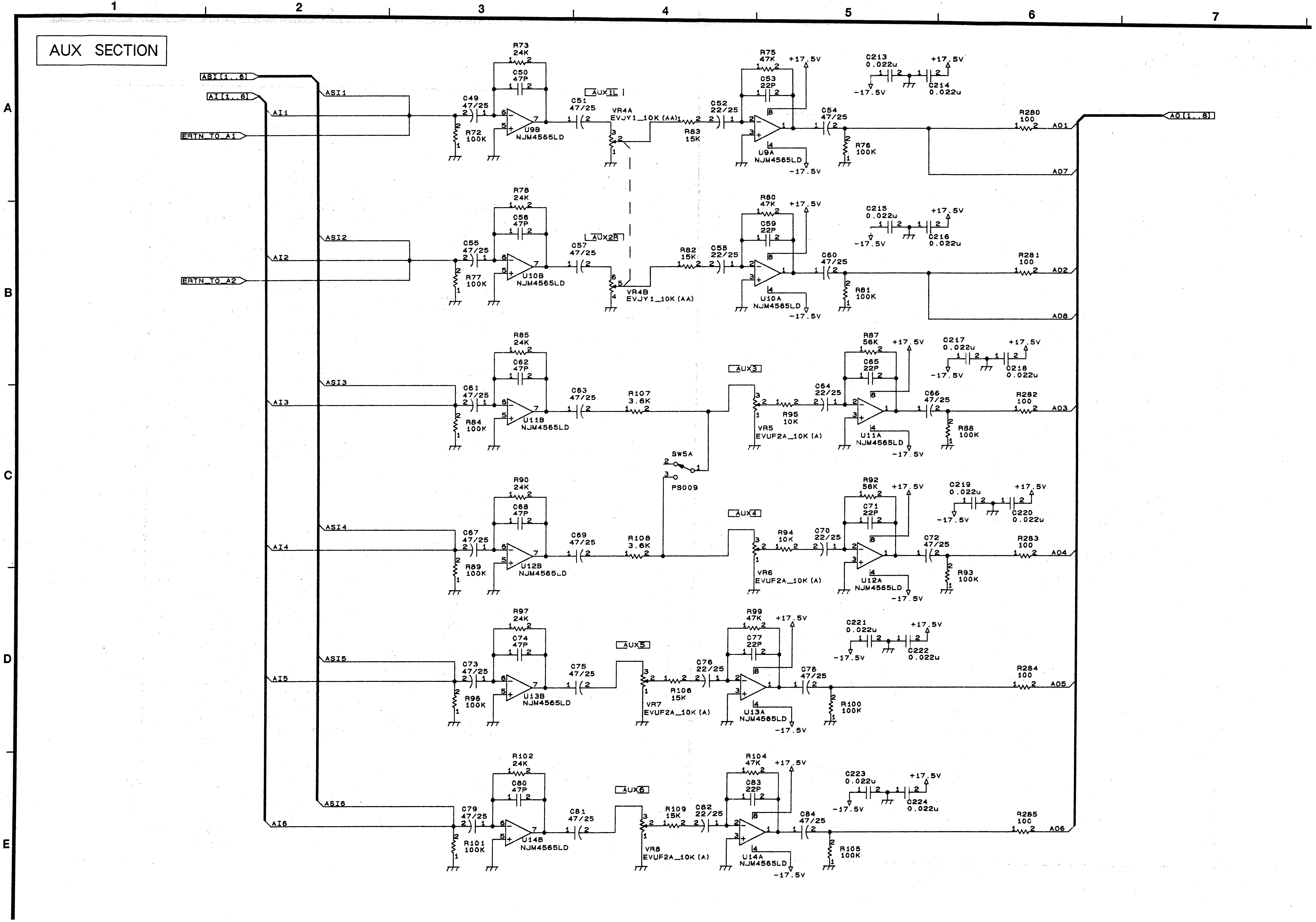
TASCAM
TEAC Professional Division

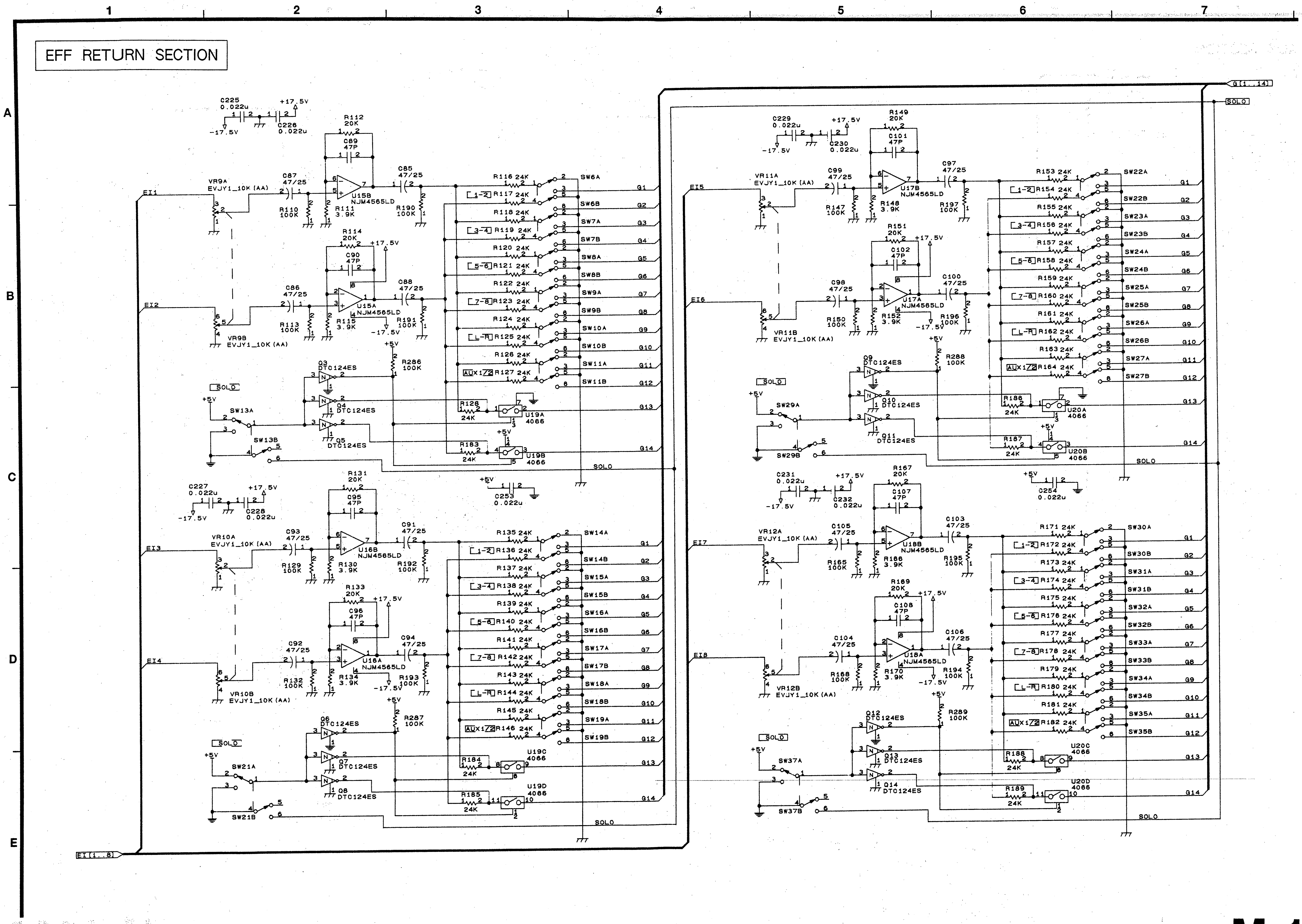
SCHEMATIC DIAGRAM M-1600 METER PCB

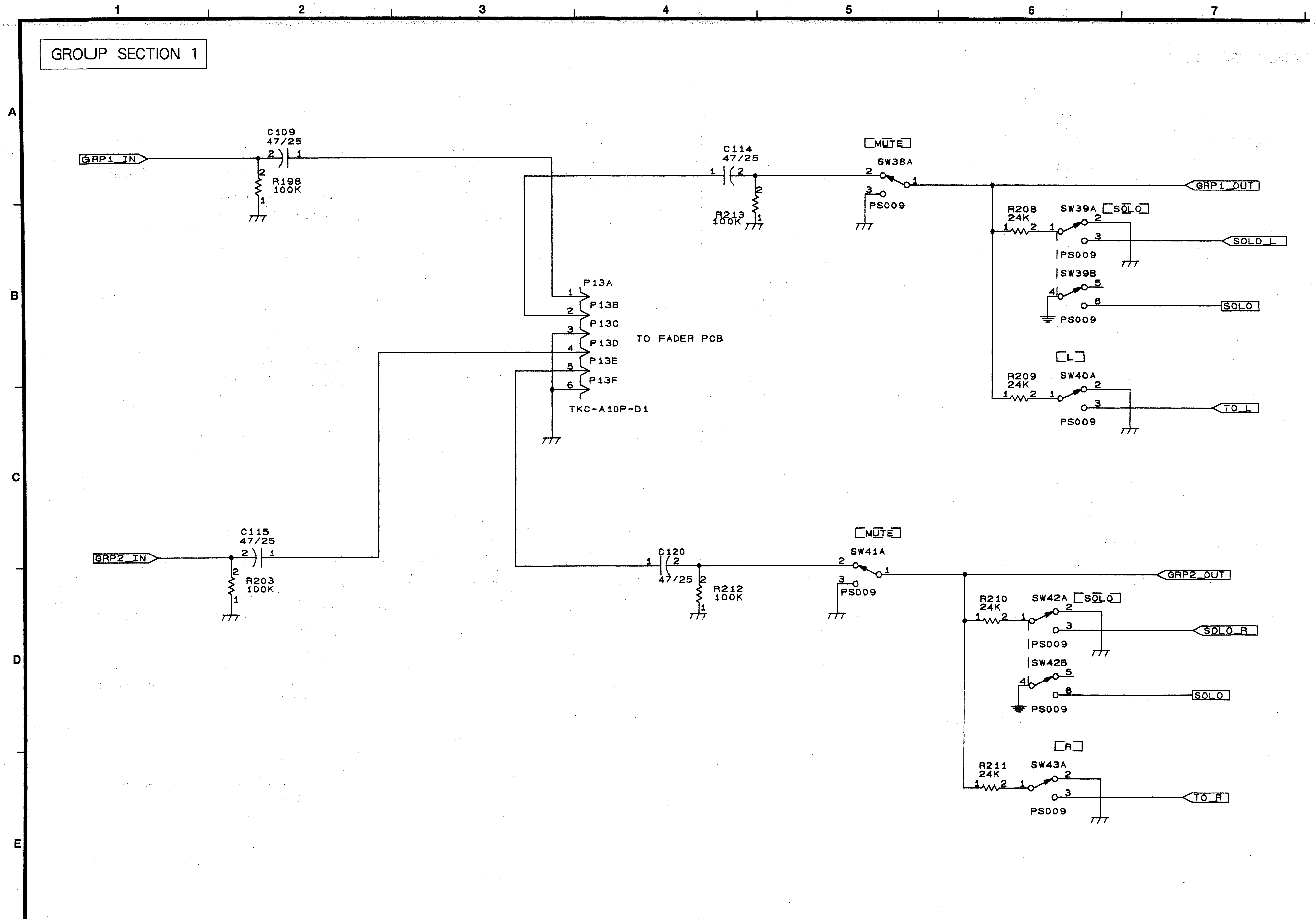

1
2
3
4
5
6
7
A
B
C
D
E
MON L
MON R
+5V
0V (5V)
0V (5V)
P LED
P1
P2
P3
P4
P5
P6
POWER
+48V
P1 : BL-001-04
P2 : BL-001-02
P3 : BL-001-08
P4, P6: S4B-EH-S
P5 : S3B-EH-S
U1-5 : LB1482M
Q1 : 2SC1815
Q2, Q3: DTC143E
Q4, Q5: DTA115E
D1, D7: SLR34DU
D2 : 1SS133
D3, D4: SLR34VR
D5, D6: LA223CZ/5Y7ED02
D101-801 : LA223CZ/3Y4ED03
G5A (ANALOG GND)
G5D (DIGITAL GND)
+5A (ANALOG PWR)
+5D (DIGITAL PWR)
GROUP1 OUT
GROUP2 OUT
GROUP3 OUT
GROUP4 OUT
GROUP5 OUT
GROUP6 OUT
GROUP7 OUT
GROUP8 OUT
MON L
0V (5V)
MON R
+5V
ST L
0V (5V)
ST R
ST L
0V (5V)
ST R
+5V
P4-6 for MU-1600
U1
U2
U3
U4
U5
GND
8P/5P
AC/DC
PH
MUTE
CH1 IN
CR1
A GND
DC IN
CR2
CH2 IN
NC
OSC
VCC1
VCC2
D1
D2
GRP1
GRP2
GRP3
GRP4
GRP5
GRP6
GRP7
GRP8
L
R
+14
+8
+4
0
-6
-15
-25
+11
+6
+2
-3
-35


1
2
3
4
5
6
7
A
B
C
D
E
TO JACKI/O PCB
TO FADER PCB
AUX SECTION 5
EFF RETURN SECTION 6
GROUP SECTION 1
GROUP SECTION 2
GROUP SECTION 3
GROUP SECTION 4
L/R
L OUT
R OUT
MONITOR
TO MONL
TO MONR
SOLO
LEVEL
H.PHONE
PHONE
TO HP PCB
TO BUSS (B) PCB
TO EXTENSION
TO METER PCB
TO BUSS (A) PCB
NJM4565LD
M5218L
EVJY1_10K (AA)
MASTER PCB
91551731-00

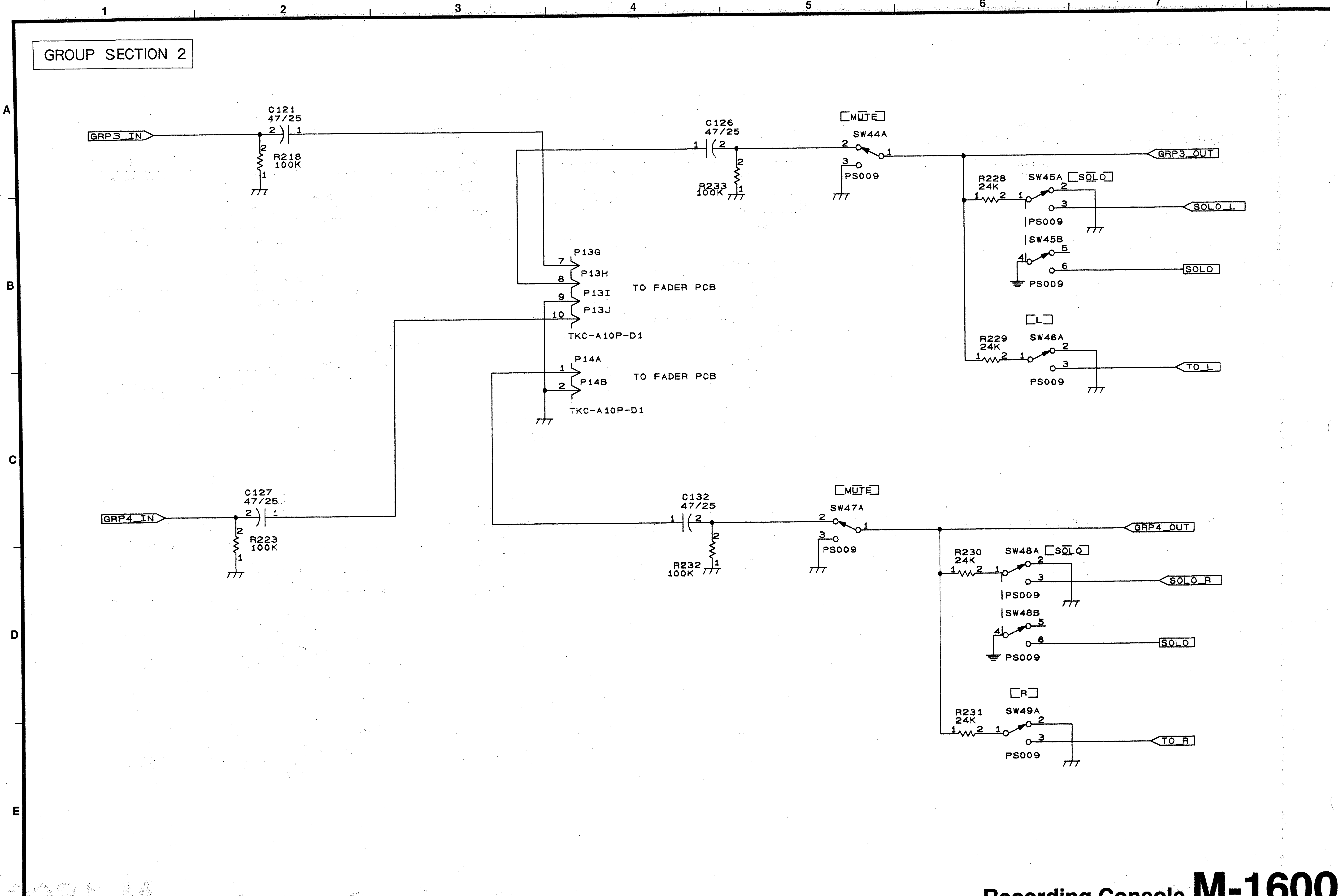
TASCAM
TEAC Professional Division SCHEMATIC DIAGRAM **M-1600** MASTER PCB (2/7)

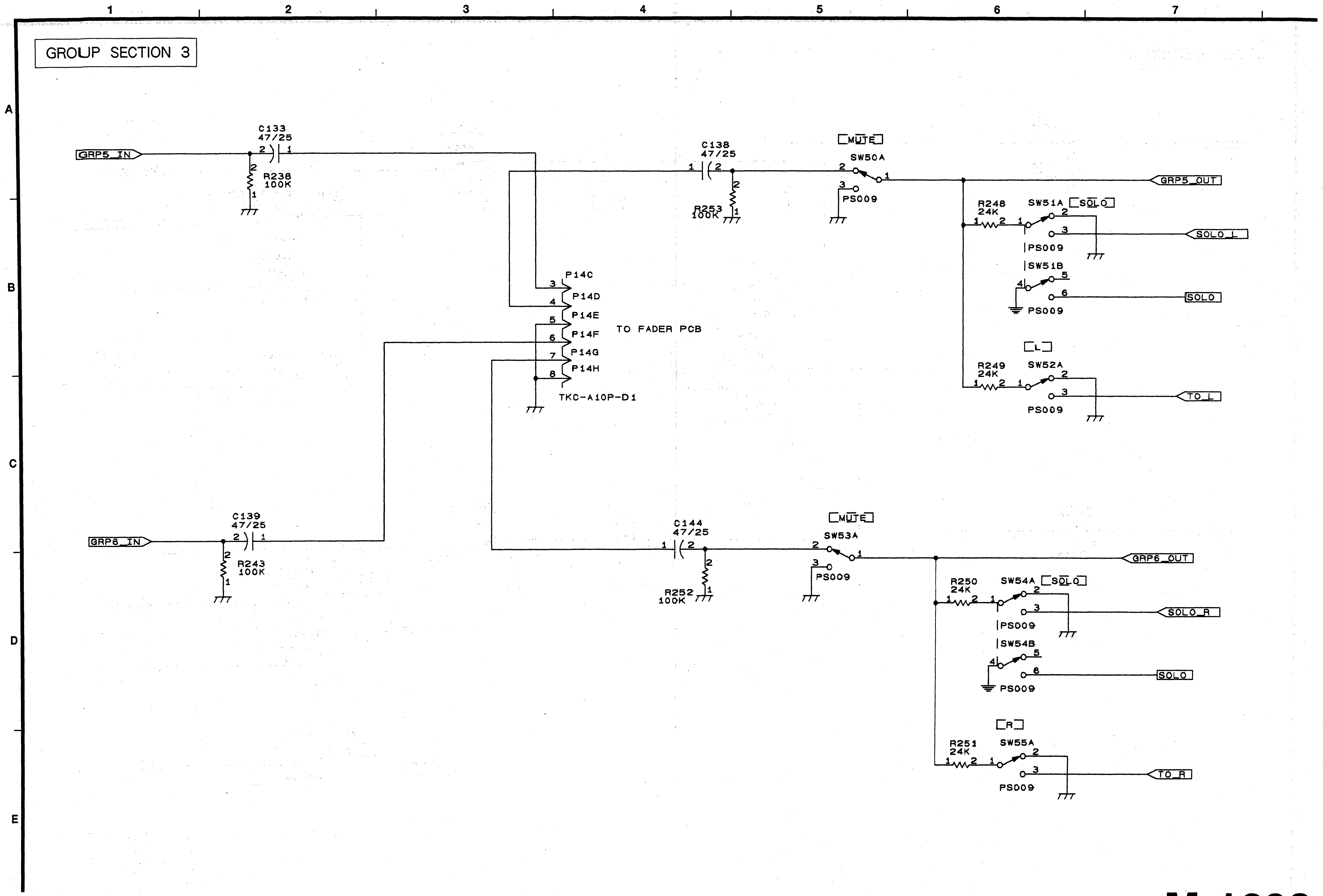

1
2
3
4
5
6
7
A
B
C
D
E
AUX SECTION
ASI[1..6]
AI[1..6]
ERTN_TO_A1
ERTN_TO_A2
ASI1
ASI2
ASI3
ASI4
ASI5
ASI6
AI1
AI2
AI3
AI4
AI5
AI6
R73 24K
C50 47P
C49 47/25
R72 100K
U9B NJM4565LD
C51 47/25
AUX1L
VR4A EVJY1_10K (AA)
R83 15K
C52 22/25
R75 47K
C53 22P
+17.5V
-17.5V
U9A NJM4565LD
C54 47/25
R76 100K
C213 0.022u
C214 0.022u
R280 100
AO1
AO7
AO[1..8]
R78 24K
C56 47P
C55 47/25
R77 100K
U10B NJM4565LD
C57 47/25
AUX2R
VR4B EVJY1_10K (AA)
R82 15K
C58 22/25
R80 47K
C59 22P
U10A NJM4565LD
C60 47/25
R81 100K
C215 0.022u
C216 0.022u
R281 100
AO2
AO8
R85 24K
C62 47P
C61 47/25
R84 100K
U11B NJM4565LD
C63 47/25
R107 3.6K
AUX3
VR5 EVUF2A_10K (A)
R95 10K
C64 22/25
R87 56K
C65 22P
U11A NJM4565LD
C66 47/25
R88 100K
C217 0.022u
C218 0.022u
R282 100
AO3
SW5A
PS009
R90 24K
C68 47P
C67 47/25
R89 100K
U12B NJM4565LD
C69 47/25
R108 3.6K
AUX4
R94 10K
VR6 EVUF2A_10K (A)
C70 22/25
R92 56K
C71 22P
U12A NJM4565LD
C72 47/25
R93 100K
C219 0.022u
C220 0.022u
R283 100
AO4
R97 24K
C74 47P
C73 47/25
R96 100K
U13B NJM4565LD
C75 47/25
AUX5
VR7 EVUF2A_10K (A)
R106 15K
C76 22/25
R99 47K
C77 22P
U13A NJM4565LD
C78 47/25
R100 100K
C221 0.022u
C222 0.022u
R284 100
AO5
R102 24K
C80 47P
C79 47/25
R101 100K
U14B NJM4565LD
C81 47/25
AUX6
VR8 EVUF2A_10K (A)
R109 15K
C82 22/25
R104 47K
C83 22P
U14A NJM4565LD
C84 47/25
R105 100K
C223 0.022u
C224 0.022u
R285 100
AO6

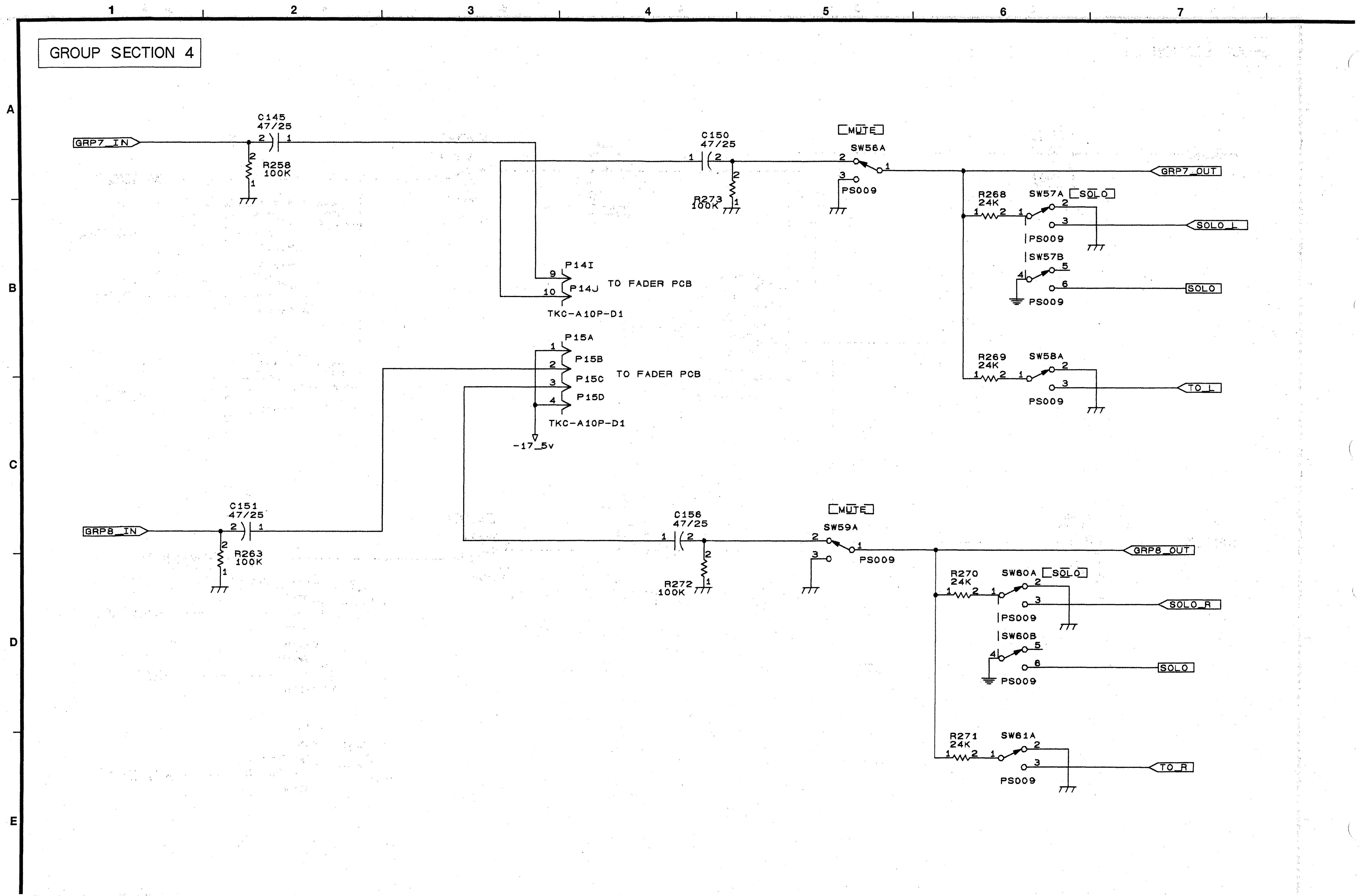

EFF RETURN SECTION
1
2
3
4
5
6
7
A
B
C
D
E
EI(1..8)
G(1..14)
SOLO
EI1
EI2
EI3
EI4
EI5
EI6
EI7
EI8
VR9A EVJY1_10K (AA)
VR9B EVJY1_10K (AA)
VR10A EVJY1_10K (AA)
VR10B EVJY1_10K (AA)
VR11A EVJY1_10K (AA)
VR11B EVJY1_10K (AA)
VR12A EVJY1_10K (AA)
VR12B EVJY1_10K (AA)
C225 0.022u
C226 0.022u
C227 0.022u
C228 0.022u
C229 0.022u
C230 0.022u
C231 0.022u
C232 0.022u
C253 0.022u
C254 0.022u
+17.5V
-17.5V
+5V
U15A NJM4565LD
U15B NJM4565LD
U16A NJM4565LD
U16B NJM4565LD
U17A NJM4565LD
U17B NJM4565LD
U18A NJM4565LD
U18B NJM4565LD
U19A 4066
U19B 4066
U19C 4066
U19D 4066
U20A 4066
U20B 4066
U20C 4066
U20D 4066
Q3 DTC124ES
Q4 DTC124ES
Q5 DTC124ES
Q6 DTC124ES
Q7 DTC124ES
Q8 DTC124ES
Q9 DTC124ES
Q10 DTC124ES
Q11 DTC124ES
Q12 DTC124ES
Q13 DTC124ES
Q14 DTC124ES
R112 20K
C89 47P
C87 47/25
R110 100K
R111 3.9K
C85 47/25
R190 100K
R114 20K
C90 47P
C86 47/25
R113 100K
R115 3.9K
C88 47/25
R191 100K
R286 100K
R131 20K
C95 47P
C93 47/25
R129 100K
R130 3.9K
C91 47/25
R192 100K
R133 20K
C96 47P
C92 47/25
R132 100K
R134 3.9K
C94 47/25
R193 100K
R287 100K
R149 20K
C101 47P
C99 47/25
R147 100K
R148 3.9K
C97 47/25
R197 100K
R151 20K
C102 47P
C98 47/25
R150 100K
R152 3.9K
C100 47/25
R196 100K
R288 100K
R167 20K
C107 47P
C105 47/25
R165 100K
R166 3.9K
C103 47/25
R195 100K
R169 20K
C108 47P
C104 47/25
R168 100K
R170 3.9K
C106 47/25
R194 100K
R289 100K
R116 24K
R117 24K
R118 24K
R119 24K
R120 24K
R121 24K
R122 24K
R123 24K
R124 24K
R125 24K
R126 24K
R127 24K
R128 24K
R183 24K
R135 24K
R136 24K
R137 24K
R138 24K
R139 24K
R140 24K
R141 24K
R142 24K
R143 24K
R144 24K
R145 24K
R146 24K
R184 24K
R185 24K
R153 24K
R154 24K
R155 24K
R156 24K
R157 24K
R158 24K
R159 24K
R160 24K
R161 24K
R162 24K
R163 24K
R164 24K
R188 24K
R187 24K
R171 24K
R172 24K
R173 24K
R174 24K
R175 24K
R176 24K
R177 24K
R178 24K
R179 24K
R180 24K
R181 24K
R182 24K
R186 24K
R189 24K
1-2
3-4
5-6
7-8
L-R
AUX1/2
SW6A
SW6B
SW7A
SW7B
SW8A
SW8B
SW9A
SW9B
SW10A
SW10B
SW11A
SW11B
SW13A
SW13B
SW14A
SW14B
SW15A
SW15B
SW16A
SW16B
SW17A
SW17B
SW18A
SW18B
SW19A
SW19B
SW21A
SW21B
SW22A
SW22B
SW23A
SW23B
SW24A
SW24B
SW25A
SW25B
SW26A
SW26B
SW27A
SW27B
SW29A
SW29B
SW30A
SW30B
SW31A
SW31B
SW32A
SW32B
SW33A
SW33B
SW34A
SW34B
SW35A
SW35B
SW37A
SW37B
G1
G2
G3
G4
G5
G6
G7
G8
G9
G10
G11
G12
G13
G14

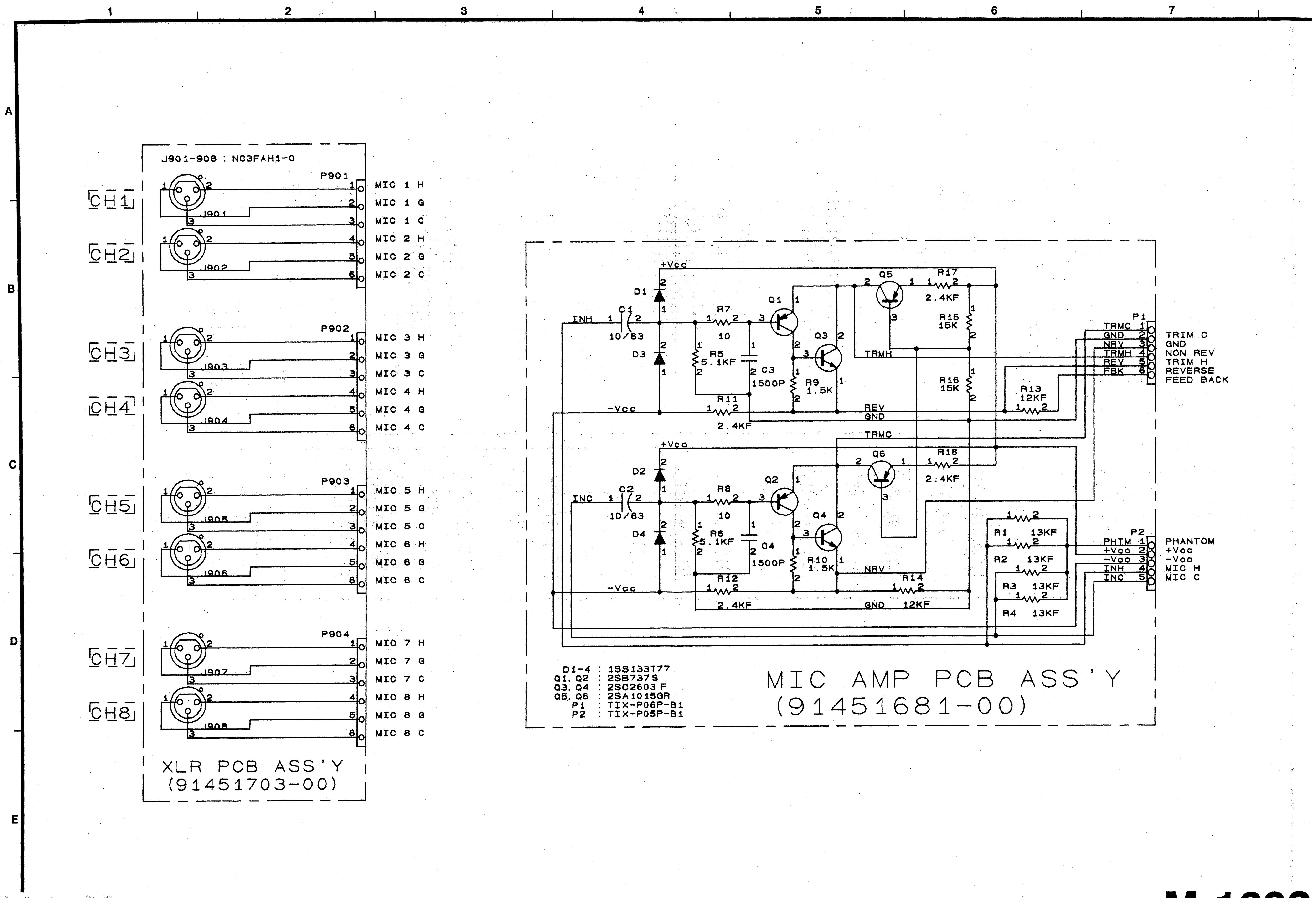

1
2
3
4
5
6
7
A
B
C
D
E
GROUP SECTION 1
GRP1_IN
C109
47/25
R198
100K
C114
47/25
R213
100K
MUTE
SW38A
PS009
GRP1_OUT
R208
24K
SW39A
SOLO
SOLO_L
PS009
SW39B
SOLO
PS009
L
R209
24K
SW40A
TO_L
PS009
P13A
P13B
P13C
P13D
P13E
P13F
TO FADER PCB
TKC-A10P-D1
GRP2_IN
C115
47/25
R203
100K
C120
47/25
R212
100K
MUTE
SW41A
PS009
GRP2_OUT
R210
24K
SW42A
SOLO
SOLO_R
PS009
SW42B
SOLO
PS009
R
R211
24K
SW43A
TO_R
PS009

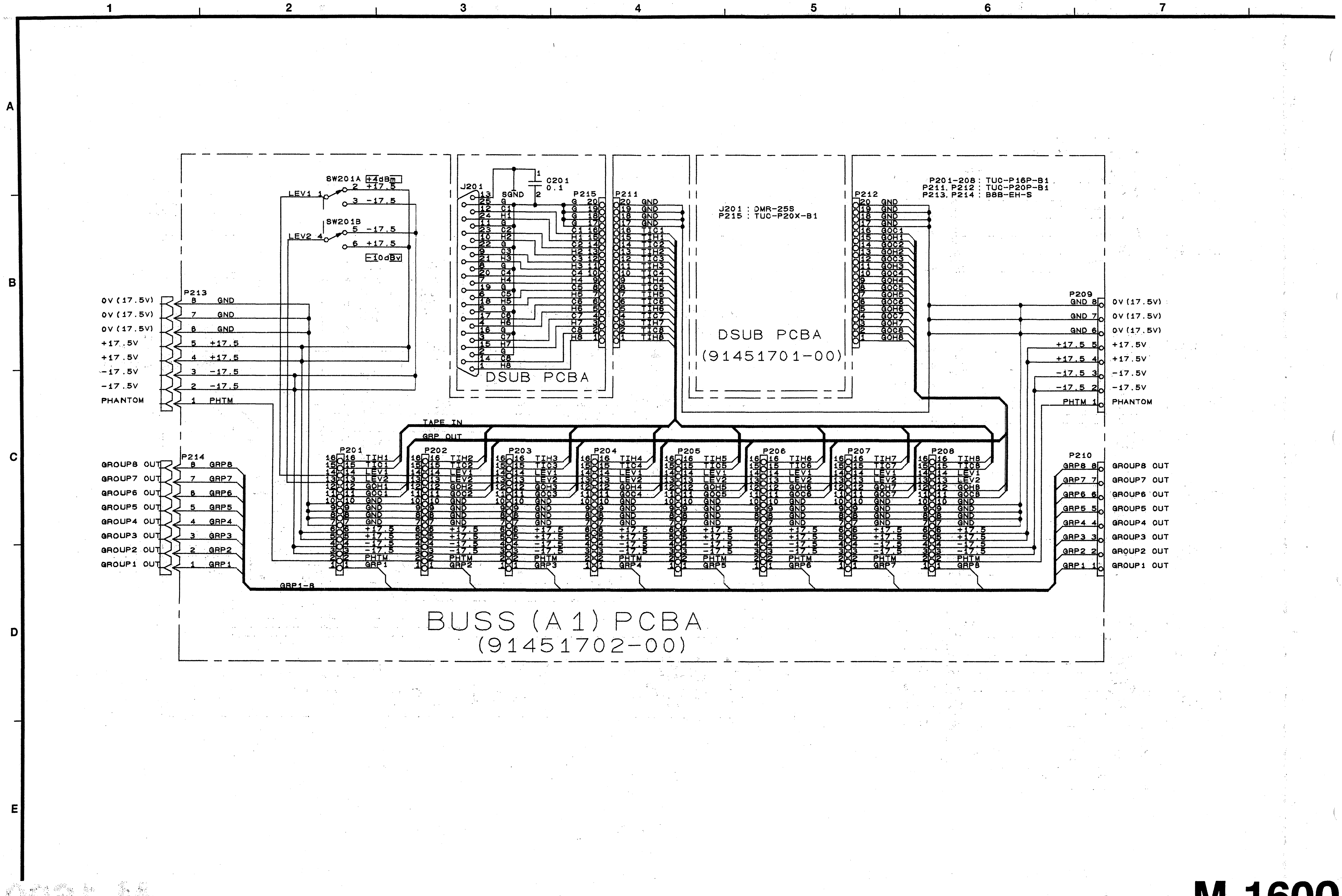
GROUP SECTION 2


1
2
3
4
5
6
7
A
B
C
D
E
GRP3_IN
C121
47/25
R218
100K
C126
47/25
R233
100K
MUTE
SW44A
PS009
GRP3_OUT
R228
24K
SW45A
SOLO
SOLO_L
PS009
SW45B
SOLO
PS009
P13G
P13H
P13I
P13J
TO FADER PCB
TKC-A10P-D1
L
R229
24K
SW46A
TO_L
PS009
P14A
P14B
TO FADER PCB
TKC-A10P-D1
GRP4_IN
C127
47/25
R223
100K
C132
47/25
R232
100K
MUTE
SW47A
PS009
GRP4_OUT
R230
24K
SW48A
SOLO
SOLO_R
PS009
SW48B
SOLO
PS009
R
R231
24K
SW49A
TO_R
PS009

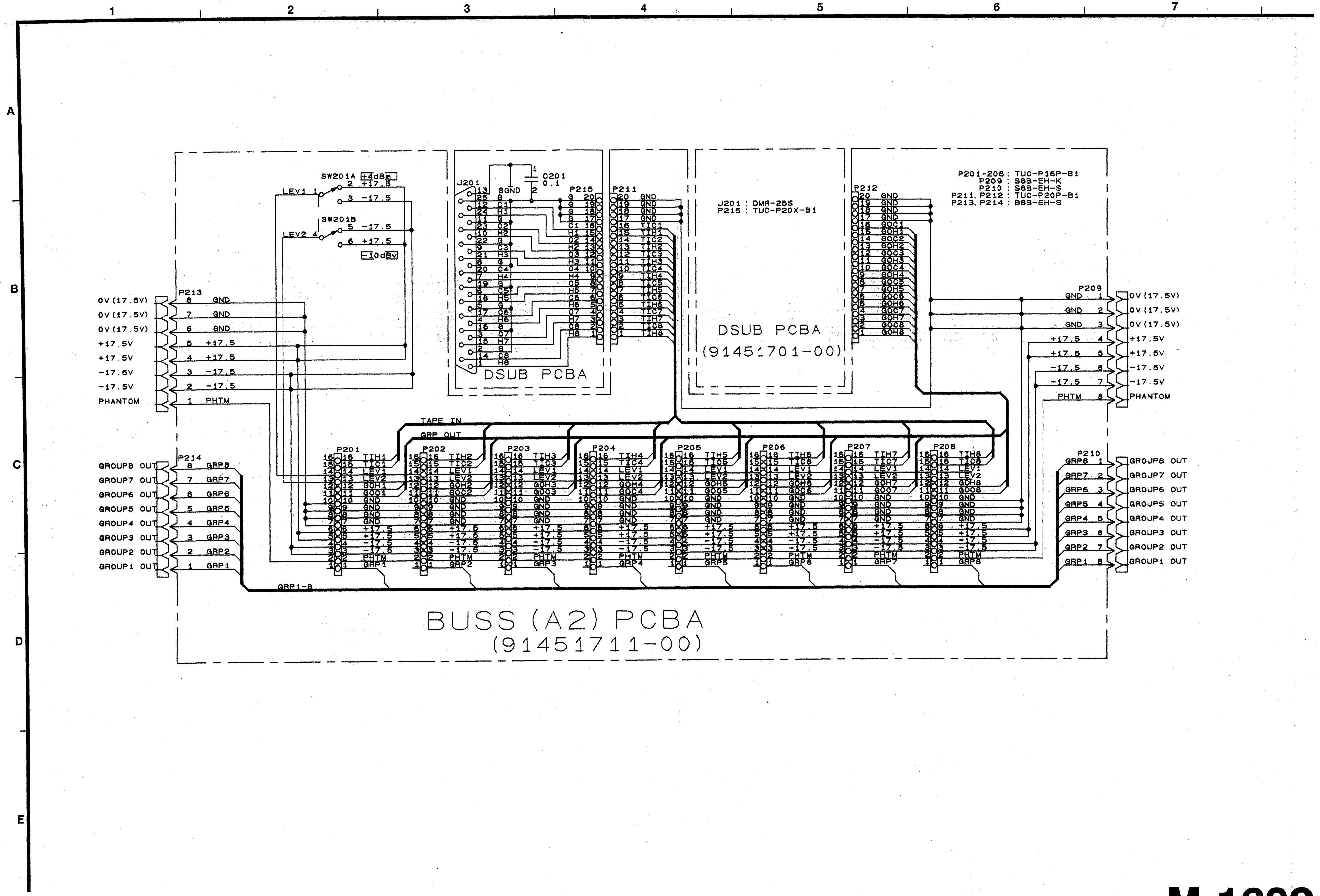

1
2
3
4
5
6
7
A
B
C
D
E
GROUP SECTION 3
GRP5_IN
C133
47/25
R238
100K
C138
47/25
R253
100K
MUTE
SW50A
PS009
GRP5_OUT
R248
24K
SW51A
SOLO
SOLO_L
PS009
SW51B
SOLO
PS009
P14C
P14D
P14E
P14F
P14G
P14H
TO FADER PCB
TKC-A10P-D1
L
R249
24K
SW52A
TO_L
PS009
GRP6_IN
C139
47/25
R243
100K
C144
47/25
R252
100K
MUTE
SW53A
PS009
GRP6_OUT
R250
24K
SW54A
SOLO
SOLO_R
PS009
SW54B
SOLO
PS009
R
R251
24K
SW55A
TO_R
PS009


1
2
3
4
5
6
7
A
B
C
D
E
GROUP SECTION 4
GRP7_IN
C145
47/25
R258
100K
C150
47/25
R273
100K
MUTE
SW56A
PS009
GRP7_OUT
R268
24K
SW57A
SOLO
PS009
SOLO_L
SW57B
PS009
SOLO
P14I
P14J
TO FADER PCB
TKC-A10P-D1
R269
24K
SW58A
PS009
TO_L
P15A
P15B
P15C
P15D
TO FADER PCB
TKC-A10P-D1
-17_5v
GRP8_IN
C151
47/25
R263
100K
C156
47/25
R272
100K
MUTE
SW59A
PS009
GRP8_OUT
R270
24K
SW60A
SOLO
PS009
SOLO_R
SW60B
PS009
SOLO
R271
24K
SW61A
PS009
TO_R


1
2
3
4
5
6
7
A
B
C
D
E
J901-908 : NC3FAH1-0
P901
P902
P903
P904
CH1
CH2
CH3
CH4
CH5
CH6
CH7
CH8
J901
J902
J903
J904
J905
J906
J907
J908
MIC 1 H
MIC 1 G
MIC 1 C
MIC 2 H
MIC 2 G
MIC 2 C
MIC 3 H
MIC 3 G
MIC 3 C
MIC 4 H
MIC 4 G
MIC 4 C
MIC 5 H
MIC 5 G
MIC 5 C
MIC 6 H
MIC 6 G
MIC 6 C
MIC 7 H
MIC 7 G
MIC 7 C
MIC 8 H
MIC 8 G
MIC 8 C
XLR PCB ASS'Y
(91451703-00)
+Vcc
-Vcc
D1
D2
D3
D4
INH
INC
C1 10/63
C2 10/63
R7 10
R8 10
R5 5.1KF
R6 5.1KF
C3 1500P
C4 1500P
R9 1.5K
R10 1.5K
R11 2.4KF
R12 2.4KF
Q1
Q2
Q3
Q4
Q5
Q6
R17 2.4KF
R18 2.4KF
R15 15K
R16 15K
R13 12KF
R14 12KF
TRMH
TRMC
REV
NRV
GND
P1
TRMC 1
GND 2
NRV 3
TRMH 4
REV 5
FBK 6
TRIM C
GND
NON REV
TRIM H
REVERSE
FEED BACK
R1 13KF
R2 13KF
R3 13KF
R4 13KF
P2
PHTM 1
+Vcc 2
-Vcc 3
INH 4
INC 5
PHANTOM
+Vcc
-Vcc
MIC H
MIC C
D1-4 : 1SS133T77
Q1, Q2 : 2SB737S
Q3, Q4 : 2SC2603 F
Q5, Q6 : 2SA1015GR
P1 : TIX-P06P-B1
P2 : TIX-P05P-B1
MIC AMP PCB ASS'Y
(91451681-00)

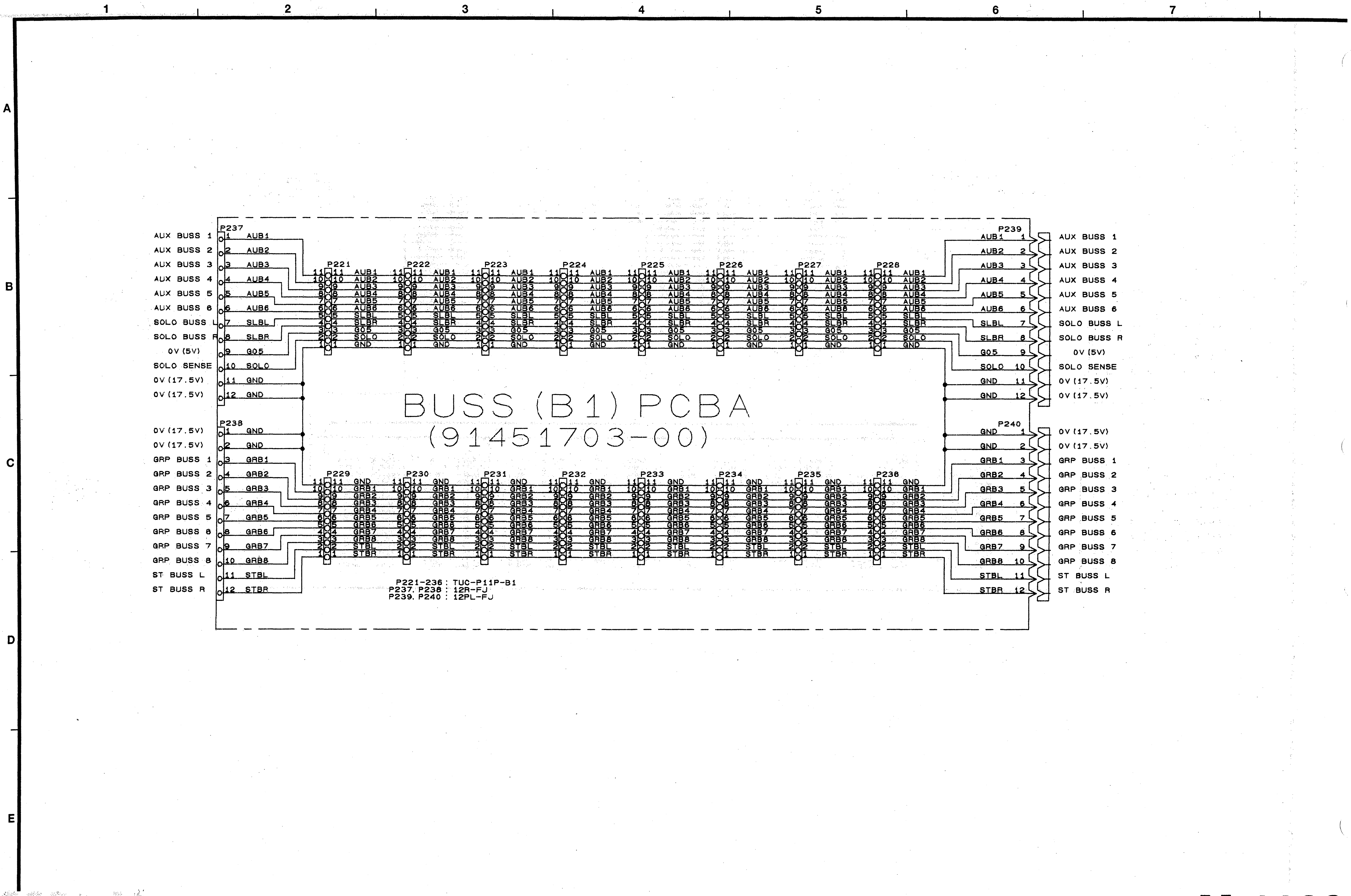

1
2
3
4
5
6
7
A
B
C
D
E
SW201A +4dBm
2 +17.5
3 -17.5
LEV1 1
SW201B
5 -17.5
6 +17.5
LEV2 4
-10dBv
J201
SGND
C201 0.1
P215
P211
P212
J201 : DMR-25S
P215 : TUC-P20X-B1
P201-208 : TUC-P16P-B1
P211, P212 : TUC-P20P-B1
P213, P214 : B8B-EH-S
DSUB PCBA
DSUB PCBA (91451701-00)
P213
0V (17.5V) 8 GND
0V (17.5V) 7 GND
0V (17.5V) 6 GND
+17.5V 5 +17.5
+17.5V 4 +17.5
-17.5V 3 -17.5
-17.5V 2 -17.5
PHANTOM 1 PHTM
P209
GND 8 0V (17.5V)
GND 7 0V (17.5V)
GND 6 0V (17.5V)
+17.5 5 +17.5V
+17.5 4 +17.5V
-17.5 3 -17.5V
-17.5 2 -17.5V
PHTM 1 PHANTOM
TAPE IN
GRP OUT
P214
GROUP8 OUT 8 GRP8
GROUP7 OUT 7 GRP7
GROUP6 OUT 6 GRP6
GROUP5 OUT 5 GRP5
GROUP4 OUT 4 GRP4
GROUP3 OUT 3 GRP3
GROUP2 OUT 2 GRP2
GROUP1 OUT 1 GRP1
P201
P202
P203
P204
P205
P206
P207
P208
P210
GRP8 8 GROUP8 OUT
GRP7 7 GROUP7 OUT
GRP6 6 GROUP6 OUT
GRP5 5 GROUP5 OUT
GRP4 4 GROUP4 OUT
GRP3 3 GROUP3 OUT
GRP2 2 GROUP2 OUT
GRP1 1 GROUP1 OUT
GRP1-8
BUSS (A1) PCBA
(91451702-00)

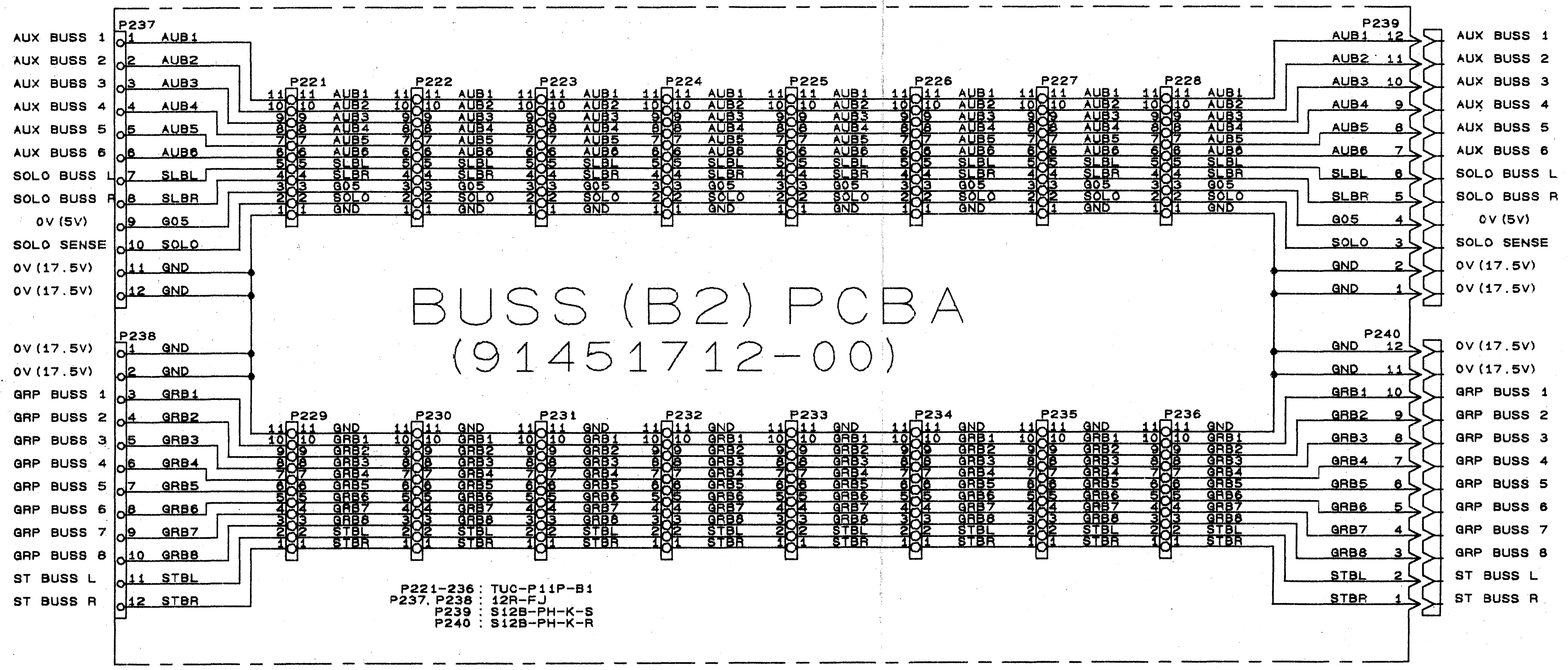
TASCAM TEAC Professional Division SCHEMATIC DIAGRAM **M-1600** BUSS (A2) PCB



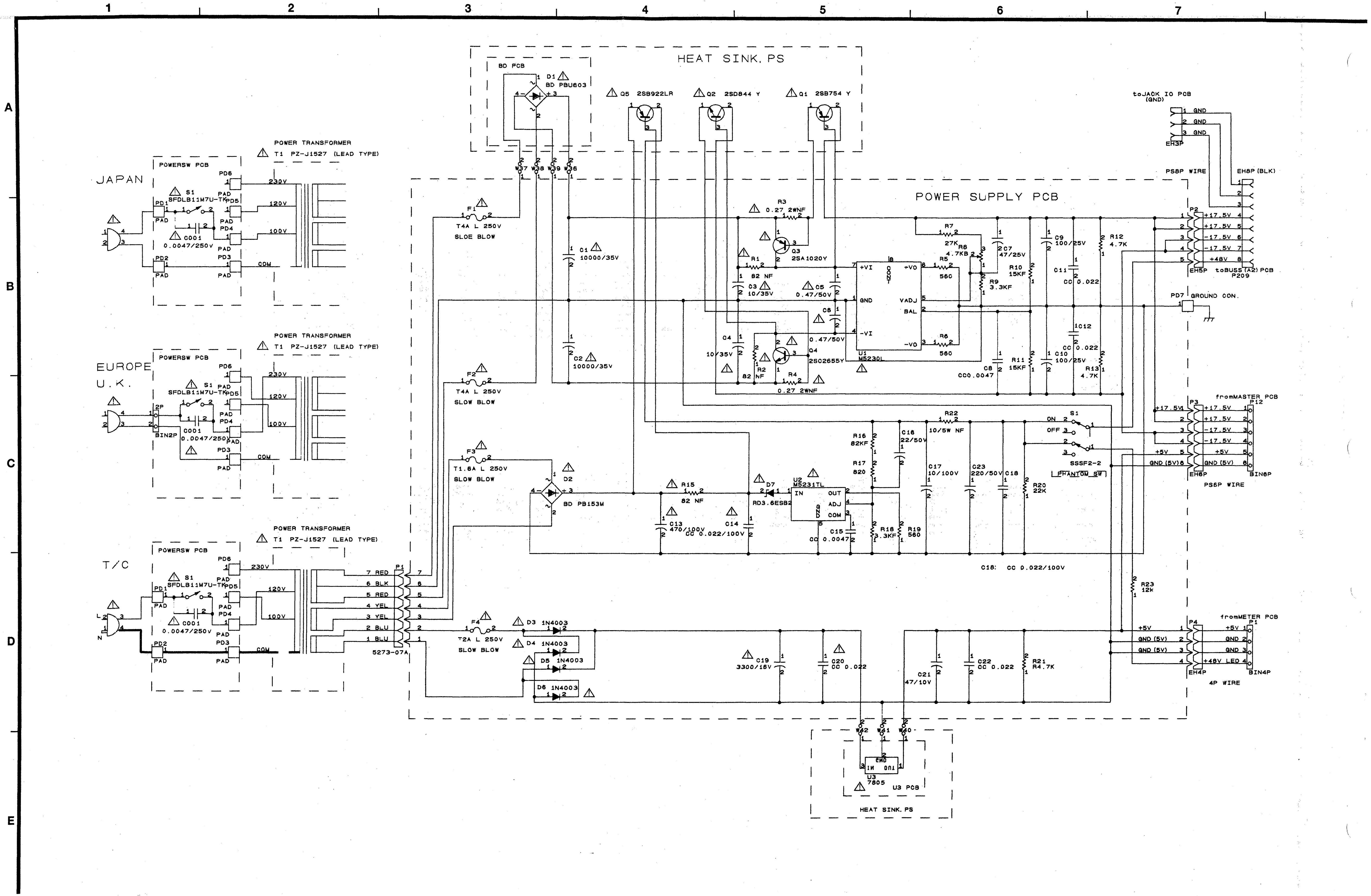
1
2
3
4
5
6
7
A
B
C
D
E
P201-208 : TUC-P16P-B1
P209 : S8B-EH-K
P210 : S8B-EH-S
P211, P212 : TUC-P20P-B1
P213, P214 : B8B-EH-S
J201 : DMR-25S
P215 : TUC-P20X-B1
SW201A
+4dBm
SW201B
-10dBV
LEV1
LEV2
C201
0.1
J201
SGND
P215
P211
P212
P213
P214
P209
P210
P201
P202
P203
P204
P205
P206
P207
P208
TAPE IN
GRP OUT
GRP1-8
0V (17.5V)
+17.5V
-17.5V
PHANTOM
GROUP8 OUT
GROUP7 OUT
GROUP6 OUT
GROUP5 OUT
GROUP4 OUT
GROUP3 OUT
GROUP2 OUT
GROUP1 OUT
DSUB PCBA
DSUB PCBA
(91451701-00)
BUSS (A2) PCBA
(91451711-00)

TASCAM TEAC Professional Division SCHEMATIC DIAGRAM M-1600 BUSS (B1) PCB


1
2
3
4
5
6
7
A
B
C
D
E
BUSS (B1) PCBA
(91451703-00)
P237
P238
P239
P240
P221
P222
P223
P224
P225
P226
P227
P228
P229
P230
P231
P232
P233
P234
P235
P236
AUX BUSS 1
AUX BUSS 2
AUX BUSS 3
AUX BUSS 4
AUX BUSS 5
AUX BUSS 6
SOLO BUSS L
SOLO BUSS R
0V (5V)
SOLO SENSE
0V (17.5V)
0V (17.5V)
GRP BUSS 1
GRP BUSS 2
GRP BUSS 3
GRP BUSS 4
GRP BUSS 5
GRP BUSS 6
GRP BUSS 7
GRP BUSS 8
ST BUSS L
ST BUSS R
AUB1
AUB2
AUB3
AUB4
AUB5
AUB6
SLBL
SLBR
G05
SOLO
GND
GRB1
GRB2
GRB3
GRB4
GRB5
GRB6
GRB7
GRB8
STBL
STBR
P221-236 : TUC-P11P-B1
P237, P238 : 12R-FJ
P239, P240 : 12PL-FJ

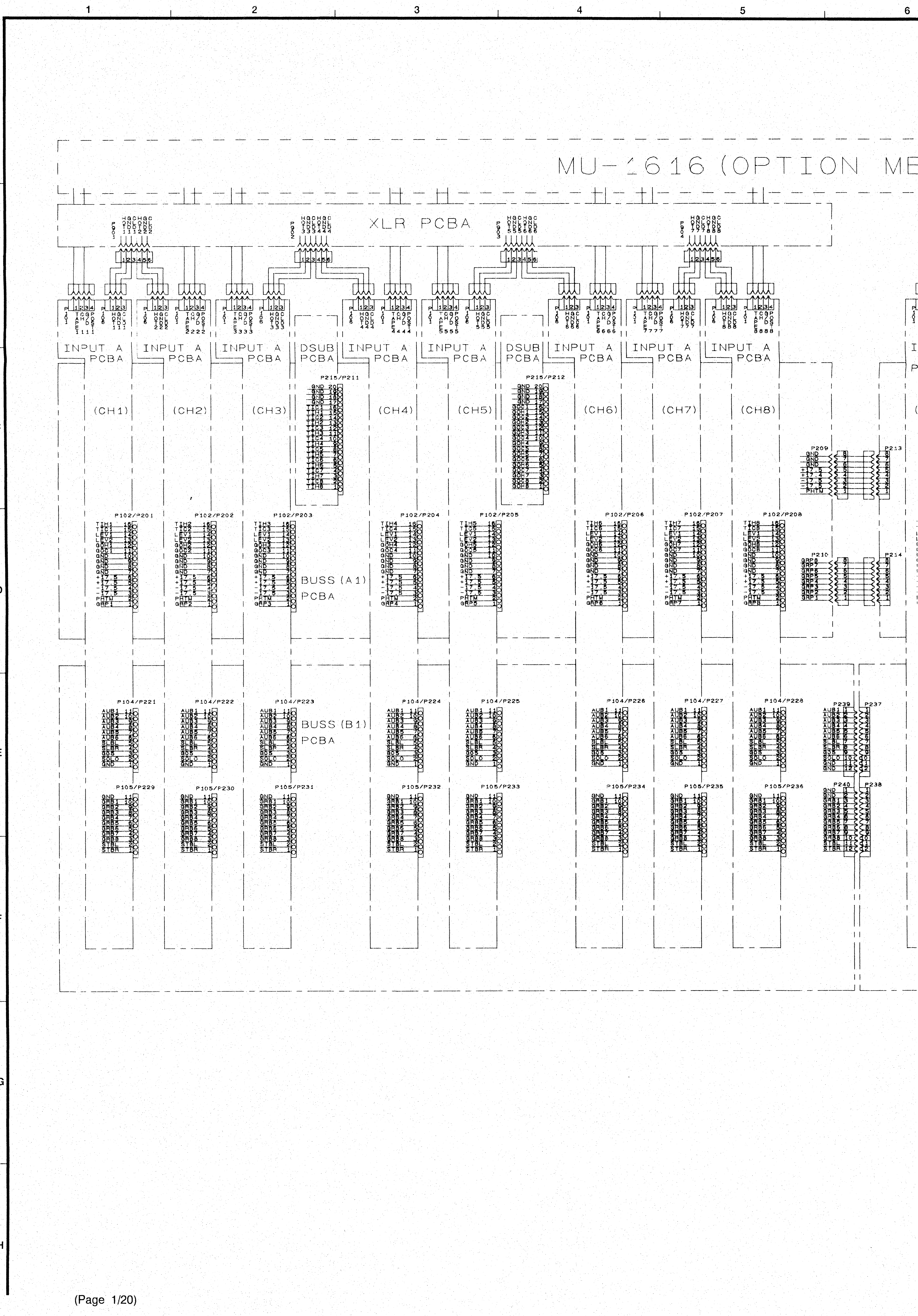

BUSS (B2) PCBA
(91451712-00)
P237
AUX BUSS 1 — 1 AUB1
AUX BUSS 2 — 2 AUB2
AUX BUSS 3 — 3 AUB3
AUX BUSS 4 — 4 AUB4
AUX BUSS 5 — 5 AUB5
AUX BUSS 6 — 6 AUB6
SOLO BUSS L — 7 SLBL
SOLO BUSS R — 8 SLBR
0V (5V) — 9 G05
SOLO SENSE — 10 SOLO
0V (17.5V) — 11 GND
0V (17.5V) — 12 GND
P238
0V (17.5V) — 1 GND
0V (17.5V) — 2 GND
GRP BUSS 1 — 3 GRB1
GRP BUSS 2 — 4 GRB2
GRP BUSS 3 — 5 GRB3
GRP BUSS 4 — 6 GRB4
GRP BUSS 5 — 7 GRB5
GRP BUSS 6 — 8 GRB6
GRP BUSS 7 — 9 GRB7
GRP BUSS 8 — 10 GRB8
ST BUSS L — 11 STBL
ST BUSS R — 12 STBR
P221 P222 P223 P224 P225 P226 P227 P228
11 AUB1
10 AUB2
9 AUB3
8 AUB4
7 AUB5
6 AUB6
5 SLBL
4 SLBR
3 G05
2 SOLO
1 GND
P229 P230 P231 P232 P233 P234 P235 P236
11 GND
10 GRB1
9 GRB2
8 GRB3
7 GRB4
6 GRB5
5 GRB6
4 GRB7
3 GRB8
2 STBL
1 STBR
P239
AUB1 12 — AUX BUSS 1
AUB2 11 — AUX BUSS 2
AUB3 10 — AUX BUSS 3
AUB4 9 — AUX BUSS 4
AUB5 8 — AUX BUSS 5
AUB6 7 — AUX BUSS 6
SLBL 6 — SOLO BUSS L
SLBR 5 — SOLO BUSS R
G05 4 — 0V (5V)
SOLO 3 — SOLO SENSE
GND 2 — 0V (17.5V)
GND 1 — 0V (17.5V)
P240
GND 12 — 0V (17.5V)
GND 11 — 0V (17.5V)
GRB1 10 — GRP BUSS 1
GRB2 9 — GRP BUSS 2
GRB3 8 — GRP BUSS 3
GRB4 7 — GRP BUSS 4
GRB5 6 — GRP BUSS 5
GRB6 5 — GRP BUSS 6
GRB7 4 — GRP BUSS 7
GRB8 3 — GRP BUSS 8
STBL 2 — ST BUSS L
STBR 1 — ST BUSS R
P221-236 : TUC-P11P-B1
P237, P238 : 12R-FJ
P239 : S12B-PH-K-S
P240 : S12B-PH-K-R

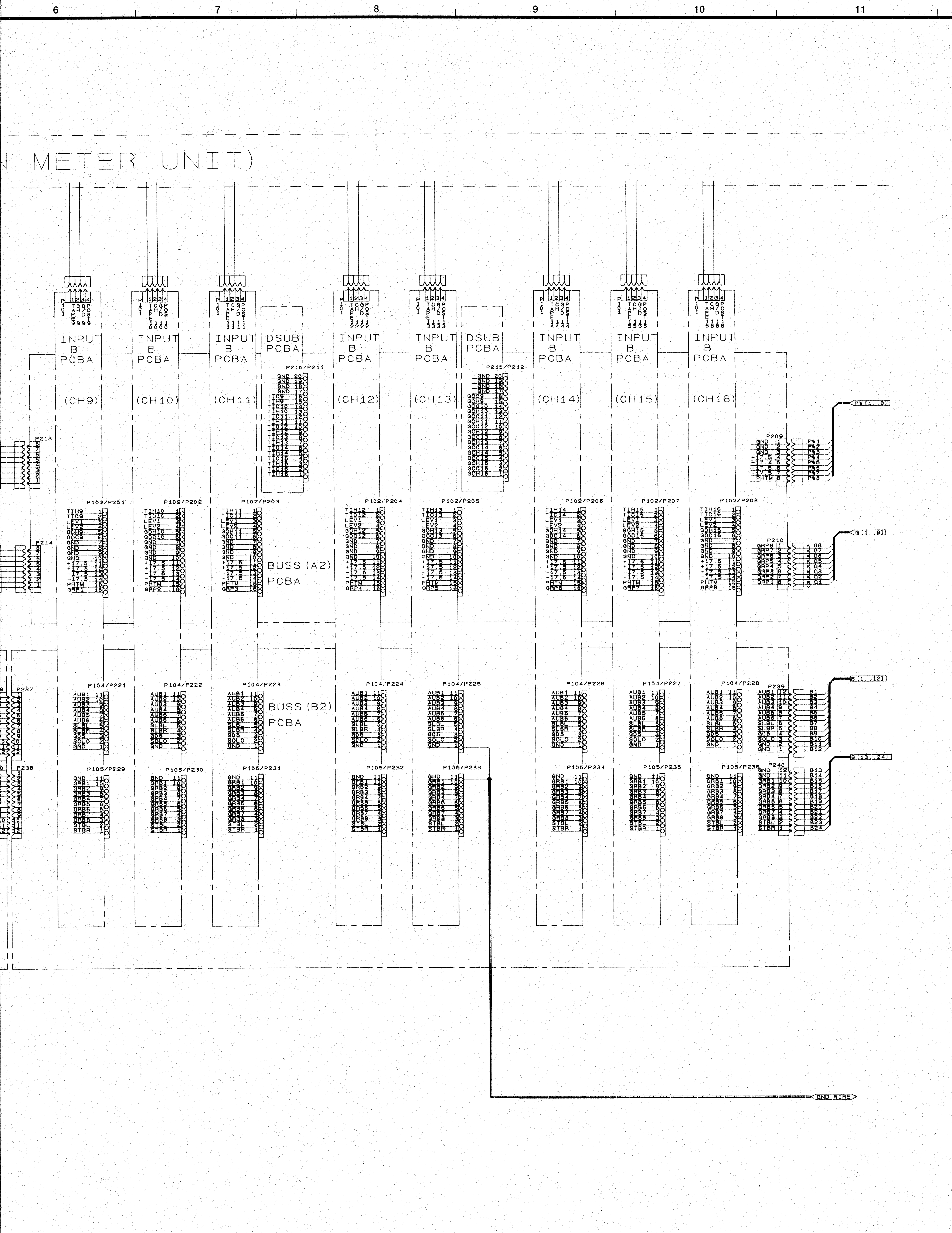
TASCAM TEAC Professional Division SCHEMATIC DIAGRAM M-1600 POWER SECTION

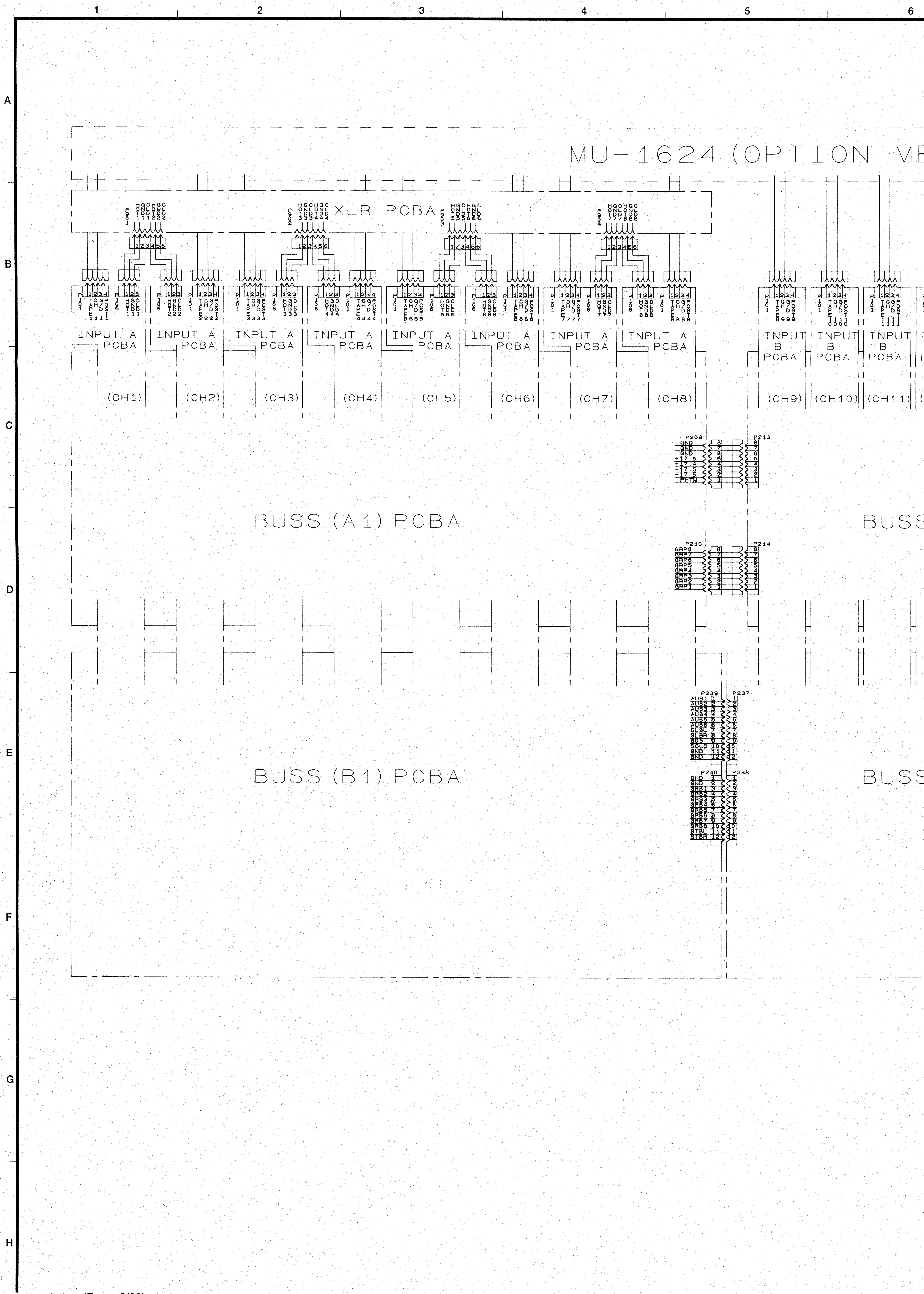


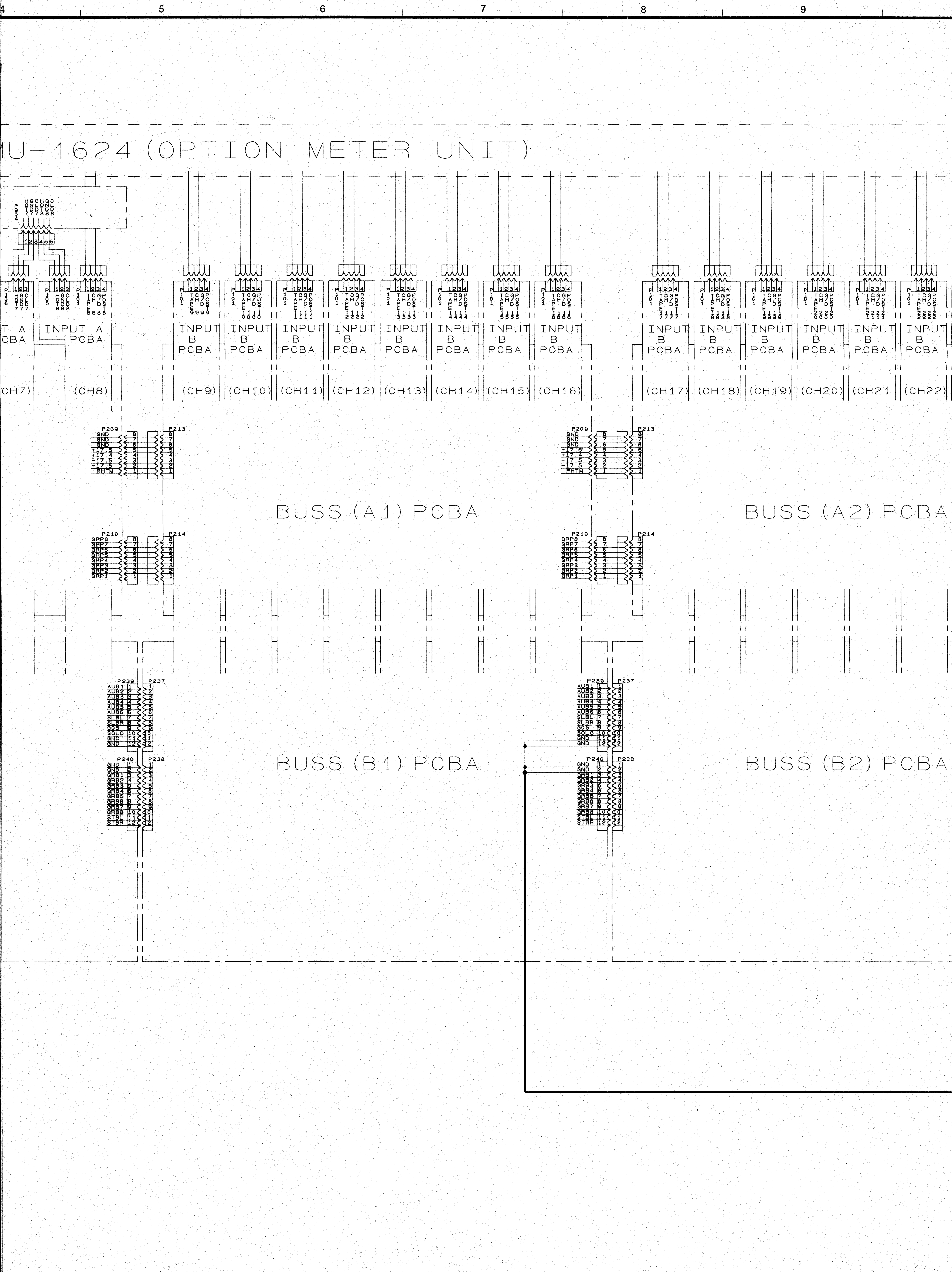
1
2
3
4
5
6
7
A
B
C
D
E
HEAT SINK, PS
BD PCB
D1 BD PBU603
Q5 2SB922LR
Q2 2SD844 Y
Q1 2SB754 Y
toJACK IO PCB (GND)
1 GND
2 GND
3 GND
EH3P
PS8P WIRE
EH8P (BLK)
POWER TRANSFORMER
T1 PZ-J1527 (LEAD TYPE)
POWERSW PCB
JAPAN
EUROPE U.K.
T/C
S1 SFDLB11M7U-TK
C001 0.0047/250V
PD1
PD2
PD3
PD4
PD5
PD6
PAD
2P
BIN2P
230V
120V
100V
COM
W37
W38
W39
W36
POWER SUPPLY PCB
F1 T4A L 250V SLOE BLOW
F2 T4A L 250V SLOW BLOW
F3 T1.6A L 250V SLOW BLOW
F4 T2A L 250V SLOW BLOW
C1 10000/35V
C2 10000/35V
R3 0.27 2WNF
R1 82 NF
C3 10/35V
Q3 2SA1020Y
C5 0.47/50V
C6 0.47/50V
C4 10/35V
Q4 2SC2655Y
R2 82 NF
R4 0.27 2WNF
U1 M5230L
+VI
GND
-VI
+VO
-VO
VADJ
BAL
CONT
R7 27K
R8 4.7KB
R5 560
R6 560
R9 3.3KF
C7 47/25V
R10 15KF
R11 15KF
C8 CC0.0047
C9 100/25V
C10 100/25V
C11 CC 0.022
C12 CC 0.022
R12 4.7K
R13 4.7K
P2
+17.5V
-17.5V
+48V
EH5P
toBUSS(A2) PCB P209
PD7 GROUND CON.
fromMASTER PCB P12
P3
+5V
GND (5V)
EH6P
BIN6P
PS6P WIRE
R22 10/5W NF
R16 82KF
R17 820
C16 22/50V
S1 ON OFF SSSF2-2 PHANTOM SW
C17 10/100V
C23 220/50V
C18
R20 22K
C18: CC 0.022/100V
D2 BD PB153M
R15 82 NF
C13 470/100V
C14 CC 0.022/100V
D7 RD3.6ESB2
U2 M5231TL
IN
OUT
ADJ
COM
C15 CC 0.0047
R18 3.3KF
R19 560
R23 12K
P1
7 RED
6 BLK
5 RED
4 YEL
3 YEL
2 BLU
1 BLU
5273-07A
D3 1N4003
D4 1N4003
D5 1N4003
D6 1N4003
C19 3300/16V
C20 CC 0.022
C21 47/10V
C22 CC 0.022
R21 R4.7K
fromMETER PCB P1
P4
+48V LED
EH4P
BIN4P
4P WIRE
W42
W41
W40
U3 7805
U3 PCB
HEAT SINK, PS
L
N

SCHEMATIC DIAGRAM M-1600 WIRING (M-1600/16 INPUT SECTION)

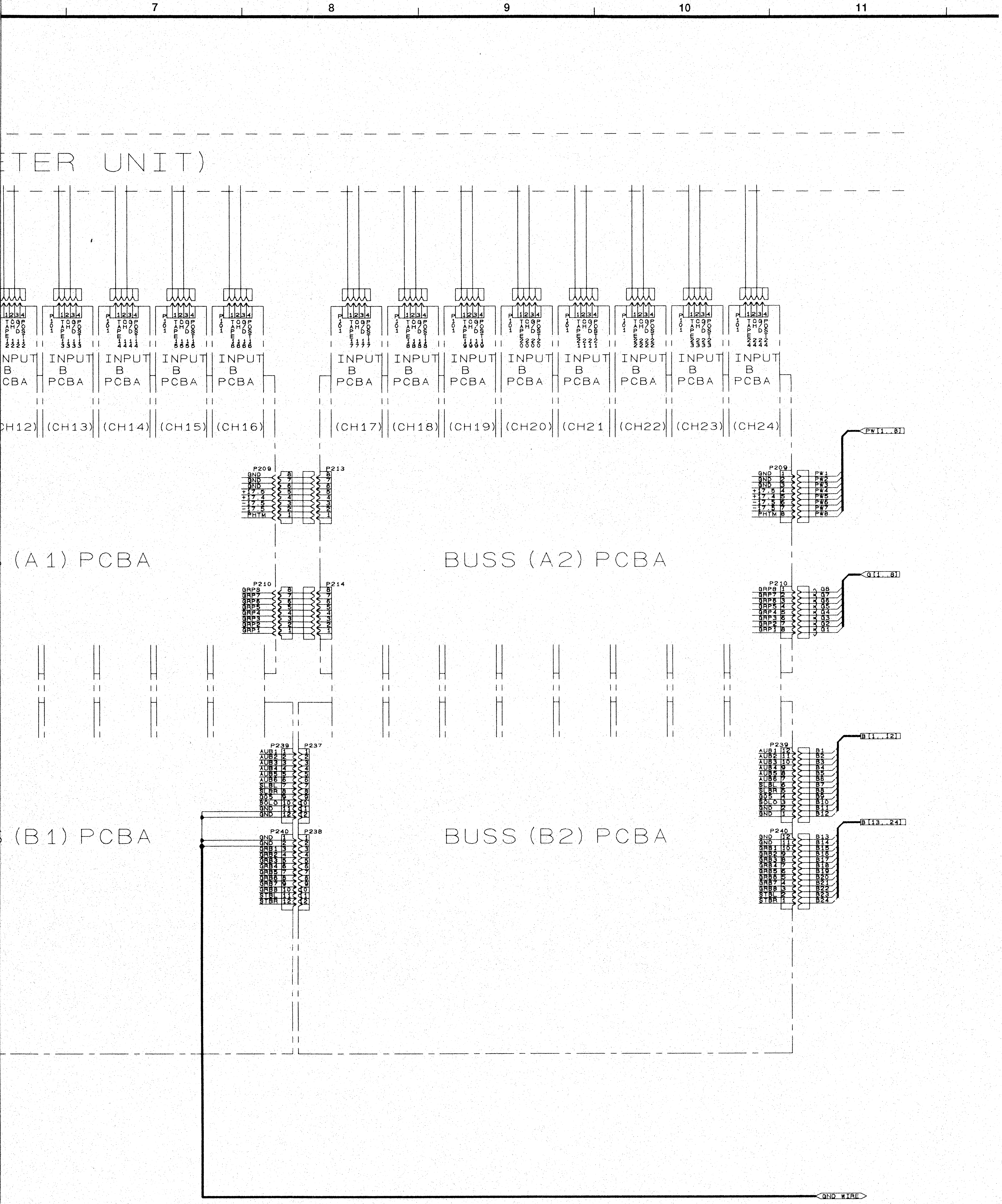

1
2
3
4
5
6
A
B
C
D
E
F
G
H
MU-1616 (OPTION ME
XLR PCBA
P901
P902
P903
P904
INPUT A PCBA
DSUB PCBA
(CH1)
(CH2)
(CH3)
(CH4)
(CH5)
(CH6)
(CH7)
(CH8)
P215/P211
P215/P212
P102/P201
P102/P202
P102/P203
P102/P204
P102/P205
P102/P206
P102/P207
P102/P208
P209
P213
P210
P214
BUSS (A1) PCBA
BUSS (B1) PCBA
P104/P221
P104/P222
P104/P223
P104/P224
P104/P225
P104/P226
P104/P227
P104/P228
P239
P237
P105/P229
P105/P230
P105/P231
P105/P232
P105/P233
P105/P234
P105/P235
P105/P236
P240
P238
TIH1
TIC1
LEV1
LEV2
GOH1
GOC1
GND
+17.5
-17.5
PHTM
GRP1
AUB1
AUB2
AUB3
AUB4
AUB5
AUB6
SLBL
SLBR
GO5
SOLO
GRB1
GRB2
GRB3
GRB4
GRB5
GRB6
GRB7
GRB8
STBL
STBR


6
7
8
9
10
11
N METER UNIT)
INPUT B PCBA
(CH9)
(CH10)
(CH11)
(CH12)
(CH13)
(CH14)
(CH15)
(CH16)
DSUB PCBA
P215/P211
P215/P212
P213
P214
P209
P210
PW[1..8]
G[1..8]
P102/P201
P102/P202
P102/P203
P102/P204
P102/P205
P102/P206
P102/P207
P102/P208
BUSS (A2) PCBA
BUSS (B2) PCBA
P104/P221
P104/P222
P104/P223
P104/P224
P104/P225
P104/P226
P104/P227
P104/P228
P105/P229
P105/P230
P105/P231
P105/P232
P105/P233
P105/P234
P105/P235
P105/P236
P237
P238
P239
P240
B[1..12]
B[13..24]
GND WIRE


1
2
3
4
5
6
A
B
C
D
E
F
G
H
MU-1624 (OPTION ME
XLR PCBA
P901
P902
P903
P904
INPUT A PCBA
INPUT B PCBA
(CH1)
(CH2)
(CH3)
(CH4)
(CH5)
(CH6)
(CH7)
(CH8)
(CH9)
(CH10)
(CH11)
P209
P213
P210
P214
P239
P237
P240
P238
BUSS (A1) PCBA
BUSS (B1) PCBA
BUSS
GND
+17.5
-17.5
PHTM
GRP1
GRP2
GRP3
GRP4
GRP5
GRP6
GRP7
GRP8
AUB1
AUB2
AUB3
AUB4
AUB5
AUB6
SOLO
GRB1
GRB2
GRB3
GRB4
GRB5
GRB6
GRB7
GRB8
STBL
STBR


4
5
6
7
8
9
MU-1624 (OPTION METER UNIT)
INPUT A PCBA
INPUT A PCBA
INPUT B PCBA
(CH7)
(CH8)
(CH9)
(CH10)
(CH11)
(CH12)
(CH13)
(CH14)
(CH15)
(CH16)
(CH17)
(CH18)
(CH19)
(CH20)
(CH21)
(CH22)
P209
P213
GND
+17.5
-17.5
PHTM
BUSS (A1) PCBA
BUSS (A2) PCBA
P210
P214
GRP8
GRP7
GRP6
GRP5
GRP4
GRP3
GRP2
GRP1
P239
P237
AUB1
AUB2
AUB3
AUB4
AUB5
AUB6
SLBL
SLBR
GO5
SOLO
BUSS (B1) PCBA
BUSS (B2) PCBA
P240
P238
GRB1
GRB2
GRB3
GRB4
GRB5
GRB6
GRB7
GRB8
STBL
STBR

Rec


7
8
9
10
11
TER UNIT)
P101
1 2 3 4
TAPE 12 CH 12 G/D 12 POST 12
TAPE 13 CH 13 G/D 13 POST 13
TAPE 14 CH 14 G/D 14 POST 14
TAPE 15 CH 15 G/D 15 POST 15
TAPE 16 CH 16 G/D 16 POST 16
TAPE 17 CH 17 G/D 17 POST 17
TAPE 18 CH 18 G/D 18 POST 18
TAPE 19 CH 19 G/D 19 POST 19
TAPE 20 CH 20 G/D 20 POST 20
TAPE 21 CH 21 G/D 21 POST 21
TAPE 22 CH 22 G/D 22 POST 22
TAPE 23 CH 23 G/D 23 POST 23
TAPE 24 CH 24 G/D 24 POST 24
NPUT B CBA
INPUT B PCBA
(CH12)
(CH13)
(CH14)
(CH15)
(CH16)
(CH17)
(CH18)
(CH19)
(CH20)
(CH21)
(CH22)
(CH23)
(CH24)
P209
GND 8
GND 7
GND 6
+17.5 5
+17.4 4
-17.5 3
-17.5 2
PHTM 1
P213
P210
GRP8 8
GRP7 7
GRP6 6
GRP5 5
GRP4 4
GRP3 3
GRP2 2
GRP1 1
P214
(A1) PCBA
BUSS (A2) PCBA
P209
GND 1 PW1
GND 2 PW2
GND 3 PW3
+17.5 4 PW4
+17.4 5 PW5
-17.5 6 PW6
-17.5 7 PW7
PHTM 8 PW8
PW[1..8]
P210
GRP8 1 G8
GRP7 2 G7
GRP6 3 G6
GRP5 4 G5
GRP4 5 G4
GRP3 6 G3
GRP2 7 G2
GRP1 8 G1
G[1..8]
P239
AUB1 1
AUB2 2
AUB3 3
AUB4 4
AUB5 5
AUB6 6
SLBL 7
SLBR 8
G05 9
SOLO 10
GND 11
GND 12
P237
P240
GND 1
GND 2
GRB1 3
GRB2 4
GRB3 5
GRB4 6
GRB5 7
GRB6 8
GRB7 9
GRB8 10
STBL 11
STBR 12
P238
(B1) PCBA
BUSS (B2) PCBA
P239
AUB1 12 B1
AUB2 11 B2
AUB3 10 B3
AUB4 9 B4
AUB5 8 B5
AUB6 7 B6
SLBL 6 B7
SLBR 5 B8
G05 4 B9
SOLO 3 B10
GND 2 B11
GND 1 B12
B[1..12]
P240
GND 12 B13
GND 11 B14
GRB1 10 B15
GRB2 9 B16
GRB3 8 B17
GRB4 7 B18
GRB5 6 B19
GRB6 5 B20
GRB7 4 B21
GRB8 3 B22
STBL 2 B23
STBR 1 B24
B[13..24]
GND WIRE